SHARP

MX-C381/C311
MX-C380/C310

Digital Full Colour Multifunctional System

SALES GUIDE

SHARP ***DOCUMENT*** SOLUTIONS

Introduction

Sharp's new MX-C381/C311 & MX-C380/C310 **A4 network colour MFPs** use the same smart features and high performance technology that's built into our award-winning A3 MFPs, packed into a unique space-saving design.

These new A4 MFPs are ideal for small/medium offices & workgroups to large offices & workgroups and have been designed with efficiency in mind.

The footprint of the MX-C381/C311 & MX-C380/C310 is the smallest in this class. The large 8.5" colour LCD touch panel on the MX-C381/C311 with handy thumbnail preview makes operating the MFPs easy, especially in IT-orientated workflow intensive environments. Whereas the MX-C380/C310 with their 4.3" colour LCD display provide easy navigation for non-workflow applications.

The remote access interface is ideal for remote administration and helpdesk support. Maintenance is very easy too, for example, each unit such as toner cartridge can be easily changed based on the CRU (Customer Replaceable Units) concept.

No compromise has been made on quality either – true 1200 x 1200 dpi printing matched with specially formulated new toner and developer ensure clear high quality images, at print speeds of 38ppm and 31ppm respectively.

They also support latest Sharp OSA 3.0, which makes it easier for users to customise their MFP and integrate it into their office workflow.

In summary, the MX-C381/C311 & MX-C380/C310 are set to bring the A4 space to a new level and become the centre of activity in every office.

MX-C381/MX-C311

MX-C380/MX-C310

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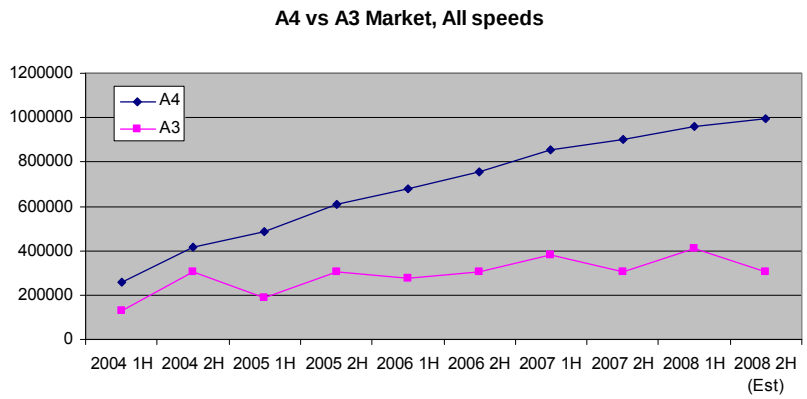
Market Analysis

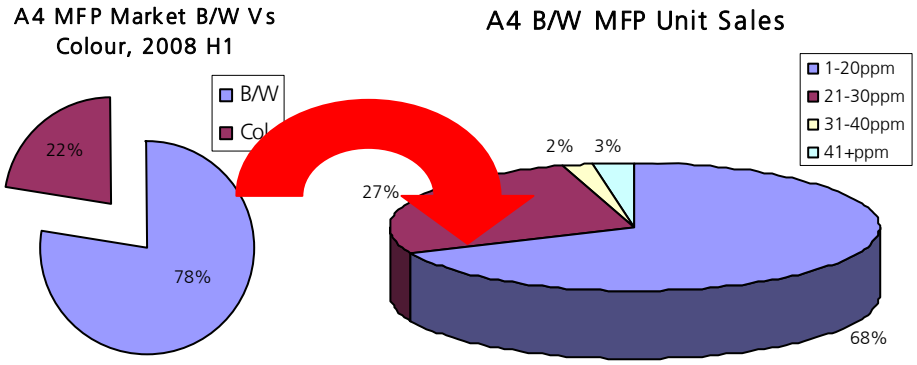
Market overview – the A4 MFP Market

The A4 market, in terms of unit sales, is a much bigger market than the A3 equivalent.



Since the A4 market is set to grow by 35% CAGR between 2004 H1 and 2008 H2, it is clear that there is plenty of demand for A4 products.

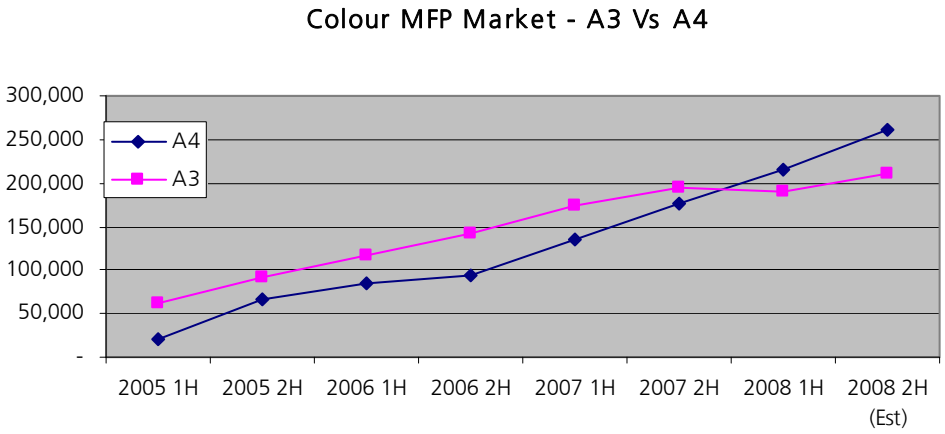
However, the majority of sales of A4 products are for slower, desktop models, often black and white – the kind of machine you can buy in any IT retailer.



In other words, the A4 colour business MFP market is still very much in its infancy, with small black-and-white units dominating sales.

The Colour A4 Market

Whilst it may be a relatively small market at the moment, the colour A4 MFP market is still an important market – and it is only going to become more important.



It is no secret that the colour MFP market has proved to be very successful in recent years. The implementation of the B2C or 'Colour Capable' strategy coupled with ever decreasing prices has helped to bring colour output to many more office settings than was previously possible.

This trend is likely to continue, with the colour MFP market (including both A3 and A4 based machines) increasing by 65% CAGR since 2005 H1.

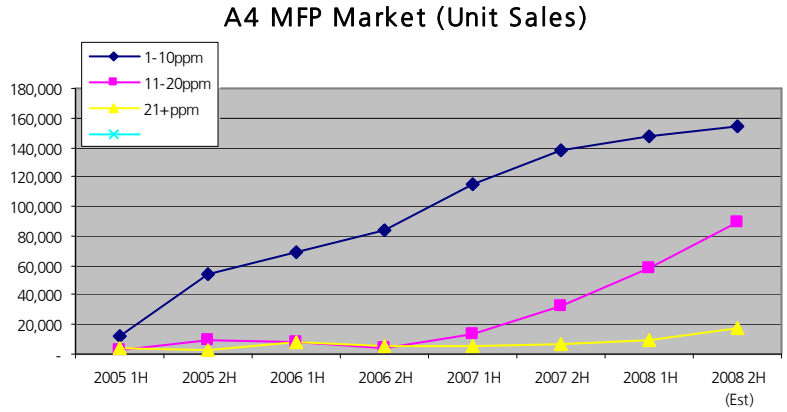
This is not the whole story though.

A 65% CAGR is undoubtedly an impressive performance – but what is really driving it? The continuing trend for introducing colour output to offices is helping, but that is not the only reason.

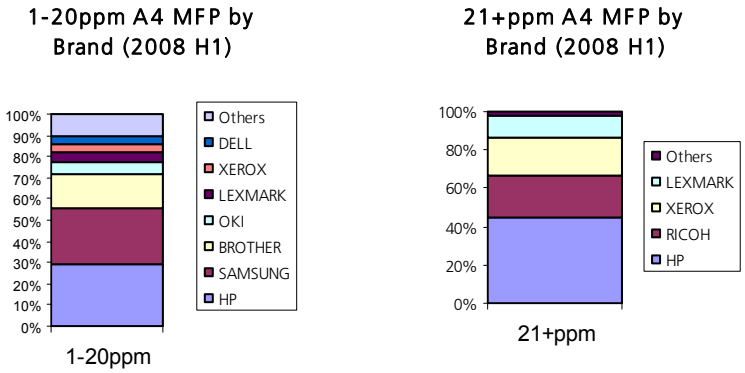
The introduction of lower priced A4 devices to the market is really driving the rapid increase in unit sales. A3 colour MFP sales increased at 41% since 2005 H1. A4 units showed a 110% increase during the same period.

Colour A4 Market – Speed breakdown

As soon as you look at the figures for the colour A4 MFP market, it becomes clear that the lower-end devices dominate.



Clearly, the 1-10ppm segment is dominant, with an estimated 60% of the market projected for 2008 H2. However, this segment is easily the most mature, it is dominated by traditional printer vendors whose route to market is via retailers and distributors, and the machines are usually 4-pass. In short, these are SOHO models, and as such really aren't competitors for the MX-C381/C311 & MX-C380/C310. This becomes obvious when you look at the breakdown of manufacturers in the 1-20ppm and 21+ppm segments.

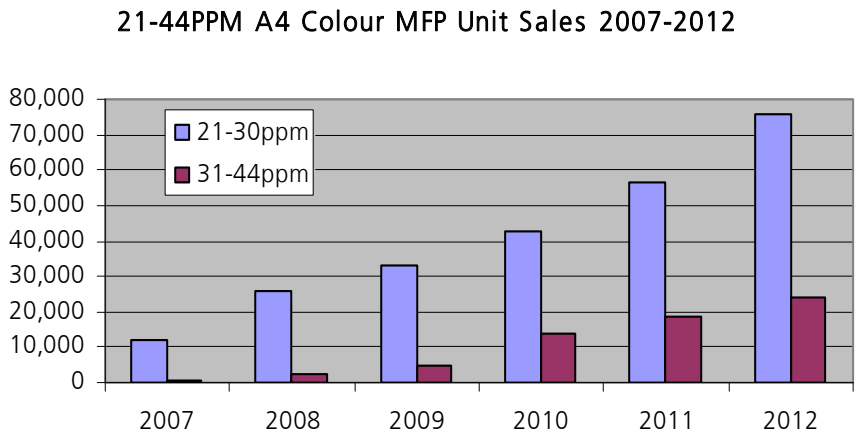


The 21+ppm A4 MFP market is clearly in its infancy, and is projected to account for only 6.5% of the overall market for A4 MFPs (2008 H2, Infosource). However, the price difference compared to A3 machines, coupled with the fact that the vast majority of output is on A4 paper means that the future of this segment is bright, since it offers compelling business reasons for deploying the smaller cheaper machine, often in tandem with larger A3 machines.

The upturn in sales of 21+ppm machines suggests that the market for faster A4 MFPs is set to grow rapidly, despite its small current market size. There is clearly a market for faster machines than the 1-10ppm segment offers, with the 11-20ppm segment enjoying rapid growth in recent months, and the 21+ppm segment also growing.

The relative lack of competitors in the 21+ ppm segment combined with the low (but growing) sales numbers shows this is a market in its infancy. It is impossible to know exactly how long it will be until this market starts growing, but with expectations of more manufacturers releasing their own machines in the coming months, it does look like it will be a high growth area soon.

The Future



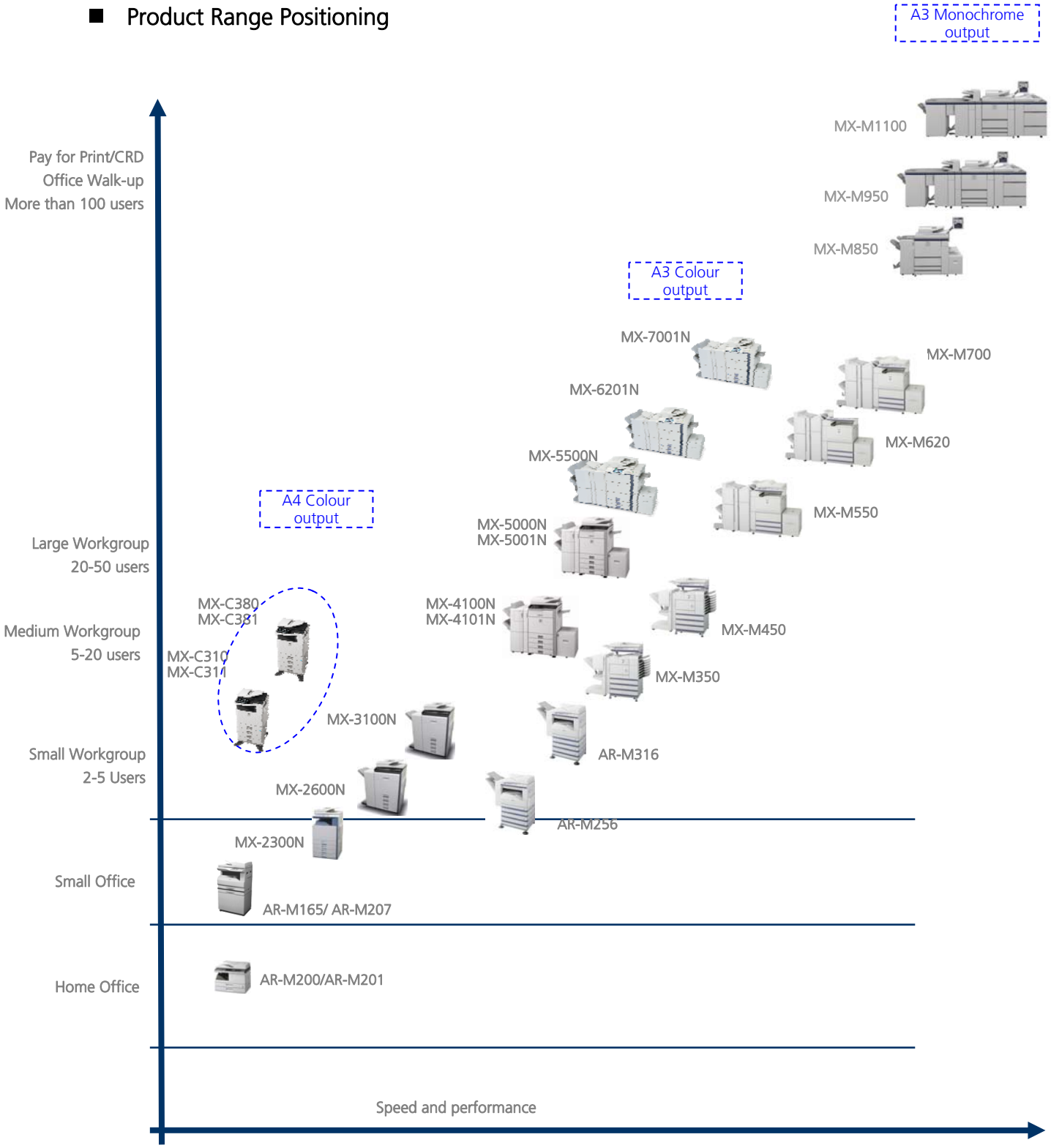
The number of units currently being sold in the 21+ppm A4 colour MFP market is very small. However, it is universally expected that the market will grow, and grow rapidly.

IDC predict a CAGR of 47% (2007 to 2012) for the 21+ppm A4 MFP market. This includes 47% for the 21-30ppm segment, and 126% for the 31-44ppm segment.

In other words, with the MX-C381/C311 & MX-C380/C310, Sharp is entering the market at the right time.

Product Positioning

■ Product Range Positioning



Recommended MCV

Speed	Model	Optimum Volume		Life
		From	To	
Black & White: 38ppm Colour: 38ppm	MX-C380/ C381	5k	8k	300K or 5 years
Black & White: 31ppm Colour: 31ppm	MX-C310/ C311	5k	8k	300K or 5 years

Optimum Monthly Volume

The recommended volume at which the copier/printer will maintain an optimum performance level on an on-going basis.

Machine Life

The Machine Life represents the product design life for a machine that has used genuine Sharp supplies and has been serviced at the preventative maintenance schedule by fully experienced technicians. It is intended for planning purposes only due to the influence on the life of the product by external sources such as environment, customer handling, copy/print media used and geographical location.

Overview of Product features

High Productivity

- BW print speed: 38/31ppm
- CL print speed: 38/31ppm
- Scanning at up to 33opm (colour and mono: 200 dpi)
- BW FCOT: 8.0sec
- CL FCOT: 8.9sec
Warm-up time: 90sec
- Multi-function ready (Copy, Print, Scan)
- Multi-job control
- Gigabit Ethernet
- Business Card Scanning by RSPF (Available at a later date)

High Image Quality

- New Toner Technology
- 1200dpi printing
- Clear and stable reproduction
- Non-oil glossy finishing
- Auto Colour mode
- Colour adjustment capability (Auto colour calibration, profiles)

Easy to Use

- Compact Design
- 8.5" colour LCD touch screen with thumbnail images and fully Sharp OSA customizable (C381/C311)
- 4.3" colour LCD screen (C380/310)
- Consistent GUI
- Web page access and control
- Preview/ Thumbnails (Fax receive, Document Filing) (C380/C310: Preview only)
- Remote operation panel
- CRU concept

Secure Data Handling

- Network Firewall (IP/Mac Filtering
- Encrypted network packet (SSL and IP sec)
- Network Authentication (log-in)
- Encrypted PDF support
- Data Encryption & Erasing (overwriting)
- Common Criteria Data Security Kit (available at a later date.)
- IEEE802.1X Support

Environmentally Friendly

- Space saving design
- Energy saving mode (Pre-heat, Auto shut-off)
- Conforms to RoHS, WEEE directive
- Awards (Nordic swan)

Efficient Utilities Software

- Document management software – Sharpdesk (1 License Std)
- Network Scanner tool (Std)
- PC-Fax driver
- Printer Status monitor (Std)
- Printer Administration Utility (Std)
- Sharp Open Systems Architecture 3.0 (Opt)

Paper Handling

- Short paper path with tandem technology
- 1 x 500 sheets cassette (Std)
- 100 sheets bypass (Std)
- Max. 2,100 sheets
- Drawers can use 105gsm paper
- Bypass can use 209gsm paper
- Duplex can use 105gsm paper
- Stack-less Duplex (Std)
- 50 sheets Document feeder (Std)

Expandability*[1]

- Super G3 Fax*[2]
- Internet-Fax (Direct SMTP support)
- PostScript PDL (Std for MX-C381/C311)
- XPS expansion kit
- Additional Sharpdesk license
- Barcode font kit

Colour Document Filing

- 80GB HDD
- MX-C381/C311: All data (Copy, Print, Scan) can be stored.
- MX-C380/C310: Only Print data can be stored
- File server capabilities
- Customisable with private folders (C381/C311)
- PIN protection available
- Easy to Re-copy/ Re-print/ Re-send

High Reliability

- Vertical path structure
- Full grip paper feeding
- Remote diagnosis (E-mail)

Various Finishing

- 250 sheets tray
- Inner Finisher with staple and off-set stacking (Opt.)

*[1] All features are optional.

*[2] Eastern Europe and Russia version don't support FAX.

The Models Explained

MX-C381/MX-C311	MX-C380/MX-C310
Control Panel	
The MX-C381/C311 boasts a larger control panel (8.5" WVGA), making it more suitable for touch-intensive applications, such as OSA programs	The MX-C380/C310 control panel is a smaller, 4.3" QVGA panel without touch-screen capabilities
Home button	
The MX-C381/C311 includes a hardware 'home' button, which takes the user to a home screen customisable to their own preferences	No home button, but there is a customisable button which allows easy access to preferred functionality
Thumbnail viewing is possible	No thumbnail viewing is available, although document preview of received faxes is possible
Document Filing	
Capacity (disk size): Main folder: 38GB Quick file: 12GB **Capacity (pages):** Main & custom: 5,500 pages or 3,000 files Quick file: 1,700 pages or 1,000 files **Custom folders: 1000 folders**	**Capacity (disk size)**: Main folder: 38GB Quick file: No **Capacity (pages):** Main: 5,500 pages or 3,000 files Quick file: No **Custom folders: No**
Document Filing – data saving for each function (main folder)	
All data (Copy, Scan, Print) are stored	Only Print data is stored
General	
Proof copy function: Yes PostScript 3 printing: Standard Data Security Kit: MX-FRX12 / 12U Dimensions in mm (WxD): 560 x **493**	Proof copy function: No PostScript 3 printing: Optional Data Security Kit: MX-FRX13 / 13U Dimensions in mm (WxD): 560 x **438**

Sales Approach

Target Environments

The MX-C381/C311 & MX-C380/C310 are designed to offer as much flexibility as possible, combining the best elements of the larger colour MFPs with their own unique features. There are several distinct potential customers for these devices.

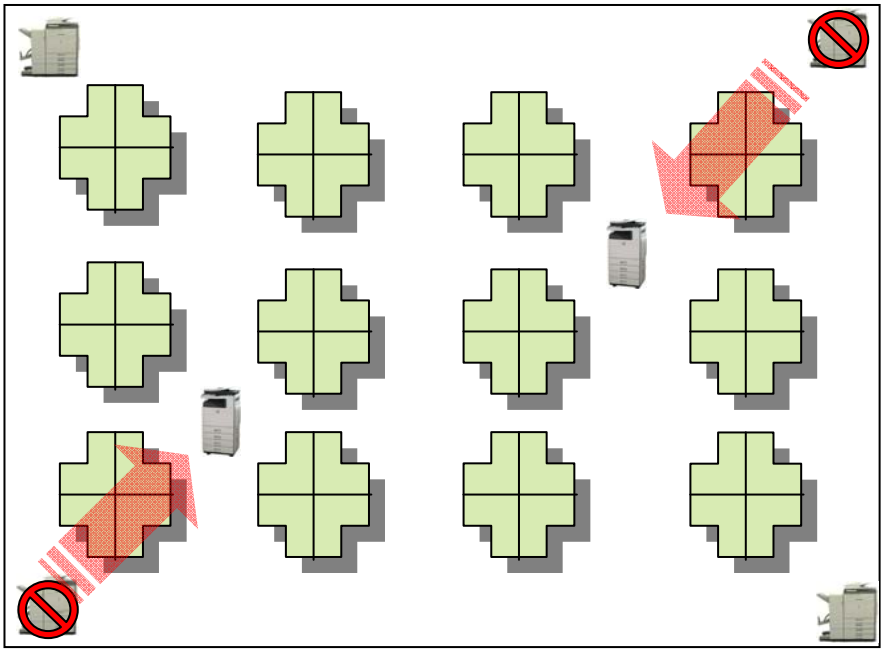
1. Mixed Deployments

It is becoming more and more common that potential customers require a mixture of A3 and A4 MFPs in their offices, or sometimes even A4-only. This may be a result of office layout, varied user requirement or simple budgetary pressure. Until now, Sharp has been unable to compete in these tenders due to the lack of an A4 machine in our range.

The MX-C381/C311 & MX-C380/C310 allows Sharp to compete in these tenders, and offers many advantages compared to our competitors, thanks to the fact that the MX-C381/C311 & MX-C380/C310 are based on the same technology as our A3 equivalent machines.

By offering a mixture of MX-C381/C311 & MX-C380/C310 together with Sharp's A3 machines, you can create the ideal solution for any office.

Instead of being limited to offering four A3 machines in this office, we can now offer a combination of machines, with A4 MFPs placed in more central and therefore more convenient locations for many workers. Compared to the costs of installing more A3 models, you can save money too!



The MX-C381/C311 & MX-C380/C310 can be integrated seamlessly into an environment that also uses Sharp's A3 colour MFPs, and offers many advantages over solutions that may involve machines from multiple vendors.

A mixed deployment involving MX-C381/C311 & MX-C380/C310 machines and our latest A3 MFPs means:

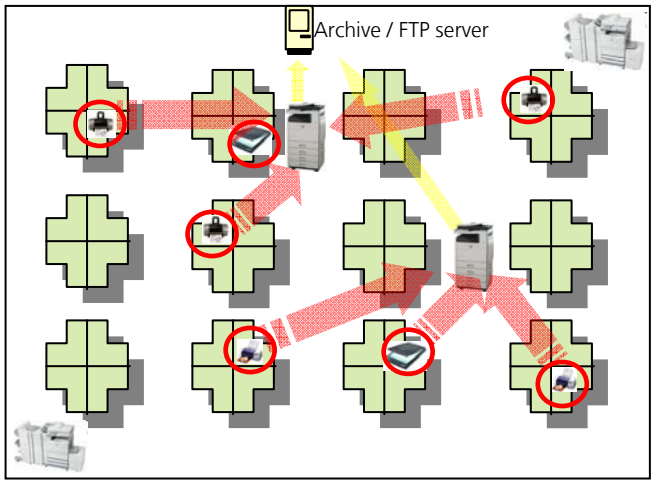
- A solution that can be **tailored** to fit any office design, user need and budget.
- **Integrated solutions** – Sharp's solution will work across the fleet. Scanning functionality (such as Sharp OSA applications) can be placed next to the desk, eliminating the need for separate scanning hardware.
- **Consistent image quality** - The MX-C381/C311 & MX-C380/C310 are based on the same technology as our A3 machines, meaning image quality will be more consistent than competitor offering where either multiple manufacturers are offered, or when A4 and A3 machines from the same vendors are offered, but are based on different technologies to each other.
- **Training** - the user interface MX-C381/C311 & MX-C380/C310 are designed to be as similar as possible to the equivalent A3 machines – meaning that once you can use one machine, you can use them all.
- **Look and feel** - the MX-C381/C311 & MX-C380/C310 have the same 'grained' textured outer design as

most of our A3 devices, maintaining consistency.

- Sharp OSA – now your Sharp OSA solutions can be installed across an entire fleet deployment, including A4 machines.
- MFP Fleet Management – Multiple Sharp MFPs can be managed remotely and efficiently using our PAU (Printer Administration Utility) software.

2. Desktop / Inkjet replacements & scanner replacements

As an office develops, its document needs also develop, but adding devices on a piecemeal basis as and when required can be both expensive and time consuming. For example, if a company initially decided to centralise its output onto a small number of high speed mono A3 devices, but then it became clear that a certain employee needed to be able to output colour, there is a good chance they would simply go out and buy a small printer. The output of that printer will not be easy to control, and running costs may not be easily discernable. It is very easy to end up with multiple, separate devices, with little or no idea of their costs, resulting in a scenario where you have several small desktop printers, all of different brands, and with little or no control over the printing costs of those printers.



All of the circled printers and scanners could be replaced with a small number of MX-C381/C311 or MX-C380/C310s

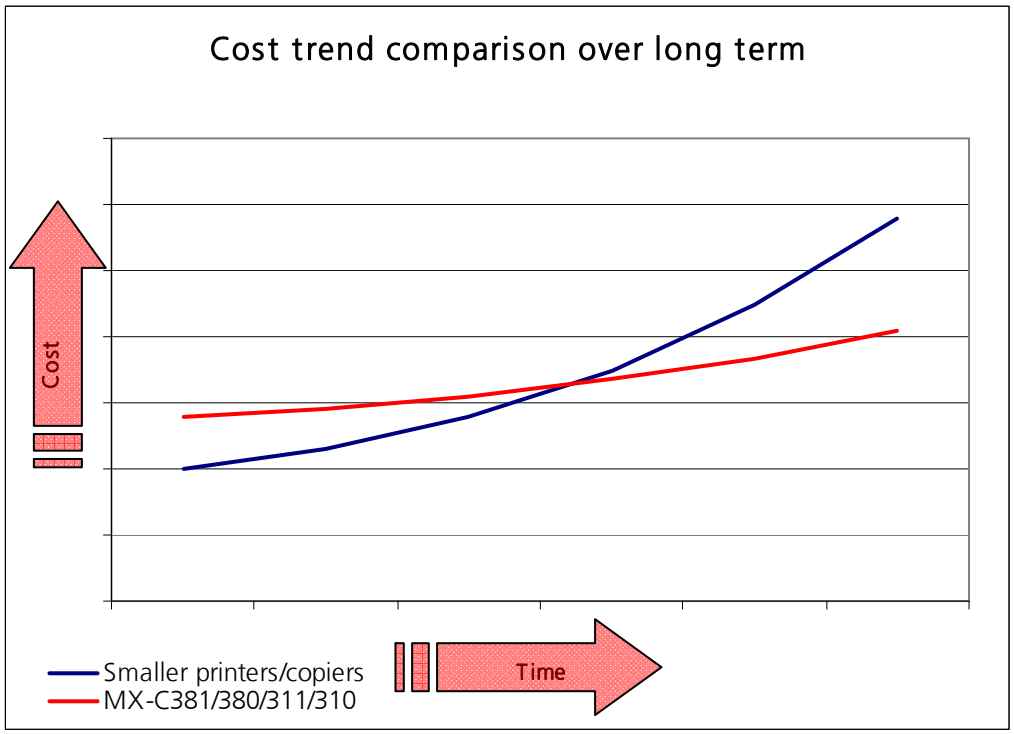
It is only natural that some people will need small printers near their desks, but by replacing these with MX-C381/C311 & MX-C380/C310, you have all the benefits of a mixed deployment, plus the additional functions of an MFP next to their desks.

Not only that, but more and more companies are using scanning to improve their workflow (for example, some companies scan all received mail for electronic distribution and archiving). Instead of having separate scanning and printing hardware, installing the MX-C381/C311 or MX-C380/C310 MFPs means you can have an integrated document solution next to your desk.
By consolidating that colour output and scanning onto a small number of MX-C381/C311 & MX-C380/C310, you create a much better document environment by:

- Making the costs of colour output visible, and therefore manageable.
- Ensure your integrated scanning solutions are well placed near their users' desks.
- Standard duplex scanning means that even double-sided originals can be scanned in seconds, especially compared to most stand-alone scanners which would need the user to manually turn the paper over.
- Giving control over exactly who can produce colour and who can't
- Allowing for a fully integrated and manageable infrastructure, as all devices will be compatible with the various Sharp applications.
- There is no need to manage the consumables for multiple different Inkjet devices
- Integrated Sharp OSA solutions can be implemented across the whole office, with access from both small MFPs next to your desk as well as larger departmental MFPs.
- Common security functionality means that by using Sharp devices across a deployment makes it possible to have complete peace of mind with a total, integrated security system.

The improvement in efficiency that comes with a mixed deployment of Sharp-only devices will usually come with a financial improvement too. The chances are that the initial cost of an MX-C381/C311 or MX-C380/C310 will be higher than the initial purchase of several smaller machines (which could include separate printers, faxes and scanners).

However, over time, the lower cost per copy combined with lower maintenance costs and the other advantages outlined above mean that the long-term costs of the MX-C381/C311 or MX-C380/C310 will usually actually be lower in comparison.



3. Introduction to colour

The benefits of the MX-C381/C311 & MX-C380/C310 are not restricted to large or medium sized companies – there is also a strong case for smaller businesses as well.

Many smaller offices just don't need to be able to output A3 sheets, or maybe can't afford the costs and physical space associated with an A3 device, but do need to be able to produce colour documents. Often this can lead to multiple different devices being used, including:

- A mono laser printer
- A separate fax machine
- An inkjet printer (thanks to the perception that colour laser products are too expensive)
- A stand-alone scanner

This kind of environment, with several different models, often from several different manufacturers, is inefficient and often does not adequately cover the office's document needs. It also restricts the availability of colour output, meaning that not everyone in the company can enjoy the benefits. Replacing all of these devices with a single MX-C381/C311 or MX-C380/C310 means you can save money and become more efficient in several ways, whatever your document requirements.

The MX-C381/C311 & MX-C380/C310 can be configured to suit any office's document requirements.
Paper handling, finishing, security and network applications (such as Sharp OSA, Sharpdesk etc) can all be modified, making the MX-C381/C311 & MX-C380/C310 the most flexible devices in their class. No other models offers this kind of flexibility in such a small footprint, and offering such fast speeds – for copying, printing and scanning.

- The MX-C381/C311 & MX-C380/C310's speed, small footprint and modular design mean they can be tailored to fit any office's document requirements.
- By consolidating up to 4 devices into a single unit, you can save space.
- A single unit is likely to consume less power than 4 separate units.
- A single set of consumables is needed, instead of potentially 4 different sets, saving space and making it easier to manage costs.
- An MX-C381/C311 & MX-C380/C310 is likely to be able to print, copy and even scan at a faster rate than cheaper single-use devices, saving time.
- Smaller, stand-alone products are unlikely to have the ability to produce finished documents, or have document filing functionality.
- If floor space is at a premium, the MX-C381/C311 & MX-C380/C310 are already the smallest in their class, and can even be configured to sit on a desk.
- Sharp OSA-based applications can be used to improve office efficiency.

4. High speed colour A4 devices

Whatever the size of business, some companies simply require high speed colour A4 devices in order to service their document needs (for example, for printing invoice batches etc), whether this be in addition to other A3-based requirements or on an A4-only basis.

By offering the MX-C381/C311 & MX-C380/C310, Sharp can cover this requirement quite easily, whilst the modular design of the MFP and high-technology included means that they can be configured to exactly meet the needs of any company deciding on their A4 colour requirements.

- The MX-C381/C311 & MX-C380/C310 are amongst the **fastest A4 machines** available.
- They are also **amongst the smallest**, especially compared with machines of a similar speed, so even high-volume printing need not take up a lot of space – even if the finisher is installed!

- The modular design of the MX-C381/C311 & MX-C380/C310 means that you can **configure it to fit your needs** – unlike its competitors (of a similar speed range), you can even place it on a desk if floor space is at a premium.
- Not only will the MX-C381/C311 & MX-C380/C310 output documents quickly, it will also **scan documents quickly** as well – particularly useful in environments where many paper documents are electronically archived.

5. Enhanced Office Integration through Sharp OSA

As office IT infrastructure has become more complex, the need to more tightly integrate the different technologies into complete workflow solutions has become more and more acute. After all, the more efficient the workflow, the more productive the office can be.

However, since every office will have different requirements, a flexible solution that can be tailored to suit any office is needed

Using Sharp's unique Open Systems Architecture (OSA), it is possible to create an application from scratch to integrate your entire Sharp MFP fleet into any office.

Alternatively, thanks to Sharp's Partner Program there are several industry-leading packages that can work with Sharp OSA – so whether you want your own solution for your own office environment, or you want a leading package 'off-the-shelf', Sharp OSA can be used to tailor the MFP to any office.

- A fully customizable User Interface (UI) means that a Sharp OSA application can make full use of the colour touch-screen control panel.
- Code description is based on standard HTML – a UI can be created with general coding skills
- Standard expansion technologies can be easily supported (such as Ajax, CSS & Flash), making development quick and easy.
- An existing Partner program, with many large developers already working with Sharp OSA means that the right integrated solution could already be available.
- Almost all of your Sharp MFPs can be connected to a Sharp OSA application – so you have use a single application throughout your office.
- Sharp OSA is network server based – so any application can be integrated throughout the office quickly and easily, and any application updated can be performed centrally too!

Why a Sharp A4 MFP?

So why buy a Sharp MFP? By combining Sharp A3 and A4 MFPs, you are combining the best of both worlds.

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A flexible and efficient document solution that can be highly integrated and tailored to give the best possible results for any office.

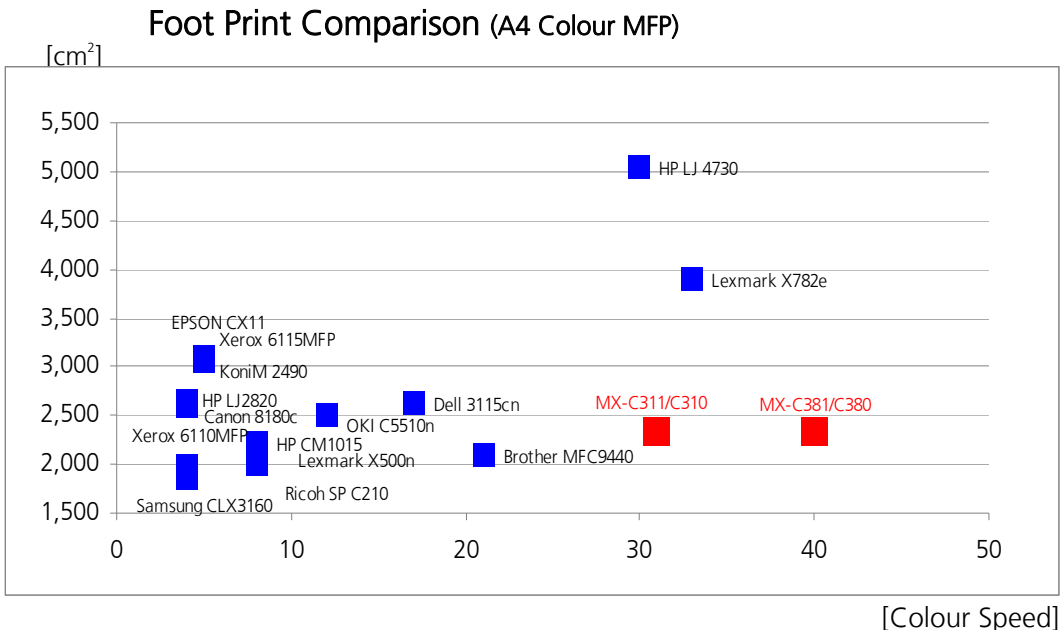
- A common architecture means that the MX-C381/C311 & MX-C380/C310 can be fully integrated with A3 devices. For example:

1. Outer styling is the same as other Sharp devices, maintaining consistency.
2. A consistent user interface means that once you have learnt to use an A3 machine, you have effectively learnt to use the MX-C381/C311 & MX-C380/C310 too. Since this applies to the LCD panel, print drivers and web pages, only one training session is required to learn about several models, saving time and money.
3. Sharp OSA applications can be deployed across the entire range, making them accessible in any environment from central printing rooms to desk-side MFPs.
4. For security conscious environments, deploying an entirely Sharp-based fleet means a consistent level of security throughout the fleet. For example, Copy Control only works on Sharp devices, therefore if you have a copy-capable machine from a different vendor it can be bypassed quite easily. Sharp's Data Security Kit is available for both A4 and A3 models.
5. Environment compatibility. If one Sharp colour MFP can work with relatively unusual systems (such as SAP, AS400 for example) you can be confident that others will too, since many are based on the same technology.
6. Image Quality. Since the MX-C381/C311 & MX-C380/C310 is based on the same technology as Sharp's A3 colour MFPs, image quality will be much more consistent across the range compared to deployments consisting of devices from multiple manufacturers and technologies.
7. Easy to manage and control costs. By using devices from a single vendor, you can use a single management application to maintain and control the entire fleet – not so easy when using devices from multiple manufacturers.
8. TCO. Consistent and easy-to-use UI's, fewer consumable types to store and manage, smaller footprints, ease-of-maintenance, ease of output management and cost control, integrated Sharp OSA applications make a Sharp-only deployment more efficient and therefore reduces the TCO.

Key Points

Footprint

The MX-C381/C311 & MX-C380/C310 may be based on the same engine as larger machines, but they have also been designed to take up as little space as possible. In fact, the footprint of the MX-C381/C311 & MX-C380/C310 is one of the smallest in its class:



This is especially impressive when you consider its output speed, especially in colour. Not only do the MX-C381/C311 & MX-C380/C310 produce colour documents as quickly as any competitor, they also have one of the smallest footprints.

Put simply, the MX-C381/C311 & MX-C380/C310 have the best speed to footprint ratio in its class, with the few smaller machines also being much slower in terms of colour output.

Manufacturer / Model	Speed Mono	Speed Colour	Width (mm)	Depth (mm)	Mm²	Compared to Sharp
Sharp MX-C311/C310	31	31	560	438	245,280	
Sharp MX-C381/C380	38	38	560	438	245,280	
HP CLJ CM4730mfp	30	30	788	639	503,532	205.3%
Lexmark X782e	38	33	679	584	395,536	161.3%
Samsung CLX-8380ND	38	38	607	574	348,418	142%

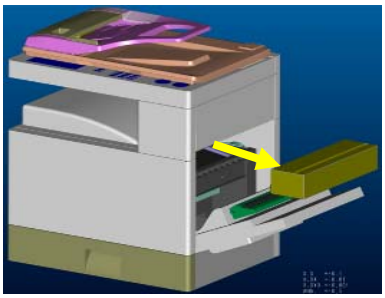
■ CRU Concept

CRU = Customer Replaceable Units

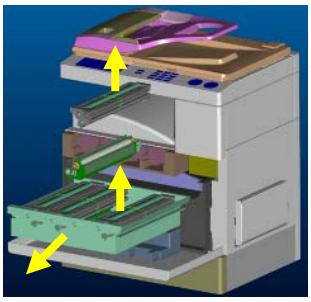
The CRU concept is a new one to this type of machine. Usually, in order to service the machine (or do anything more than change toner cartridges) a certain amount of technical knowledge is required, not to mention time any skill required to disassemble the machine to access the required parts, change those parts, and re-assemble the MFP (ensuring all parts are back where they should be, and there aren't any bits 'left over').

However, the MX-C381/C311 & MX-C380/C310 are different. By making it as quick and easy as possible to maintain the machine, cost are reduced (in terms of man-hours), and down-time is minimised.

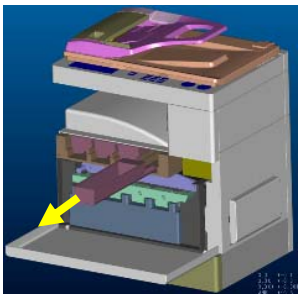
Fuser unit



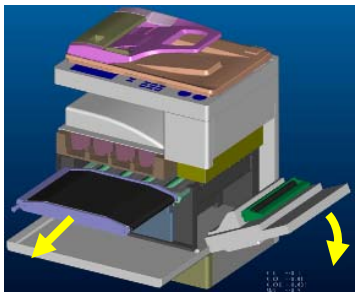
Drum & Developer unit



Toner Cartridge



Transfer belt unit



Improvements include the fact you no longer need a screwdriver for most maintenance, and developer is no longer supplied in powder form – it is now a cartridge (making it cleaner and quicker to replace).

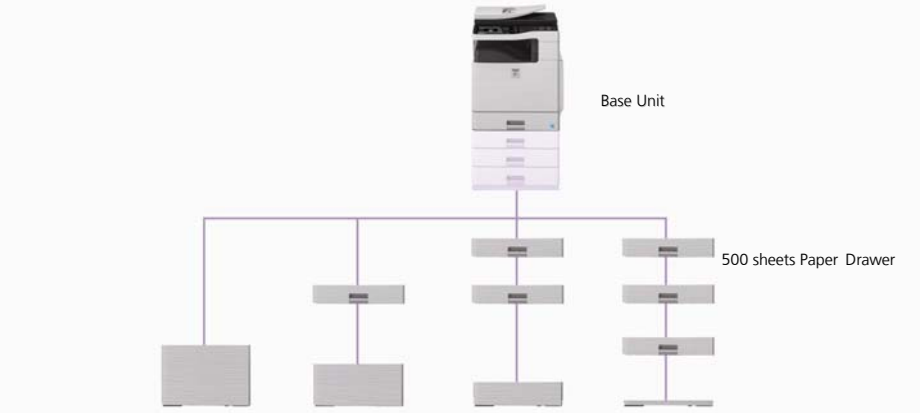
Flexibility

The MX-C381/C311 & MX-C380/C310 are unusually flexible in terms of installation placement.

Given its small footprint, it is possible to install the MX-C381/C311 & MX-C380/C310 in the smallest of floor spaces. But it can also be installed in the smallest of offices, which don't have enough floor space to put an MFP.

The MX-C381/C311 & MX-C380/C310 are based on a modular design, which means that they can be configured to best suit your office needs. This means that, in offices with no floor space the MFP can be placed on a normal desk, whereas many competitors are designed to be floor standing.

Those competing devices that are designed to be desk-based do not have some of the more advanced features of the MX-C381/C311 & MX-C380/C310, such as finishing options.



HP CLJ CM4730mfp
Std configuration

Lexmark X782e
Std configuration

Samsung CLX-8380ND
Pictured with Optional paper drawer. It is possible to install the Samsung on a desk, but its height, even without optional paper cassettes makes it impractical.

Floor-standing only

Finisher

A finisher is an excellent way to improve office efficiency. By automatically stapling documents produced by your MFP, you save time and money compared to manually finishing these documents offline after they have been printed. Even off-setting each copy of a document saves time, by making it quick and easy to separate copies after they have been removed from the MFP.

The MX-C381/C311 & MX-C380/C310 can be fitted with an inner finisher (MX-FN12), which makes it possible to staple and offset documents they produce. Combined with the duplex unit (standard), this makes the MX-C381/C311 & MX-C380/C310 capable of producing and finishing the majority of office documents quickly and easily.

In this class, not all machines even have finishing options:

Manufacturer / Model	Finisher Opt	Staple Sheets	Hole-punch
Sharp	Yes	30	No
HP CLJ CM4730	Yes	30	No
Lexmark X782e	No	No	No
Samsung CLX-8380ND	Yes	50	No

Not only does the MX-C381/C311 & MX-C380/C310 have one of the best finishing units, unlike most of the other units installing the finisher does not massively affect the footprint of the machine. In fact, adding the finisher adds only 130mm to the width of the machine, meaning that even with the finisher installed, the MX-C381/C311 & MX-C380/C310 take up less space than its competitors WITHOUT their finishers installed.

■ Business Card Scanning

The practice of scanning business cards in order to electronically store and database them is becoming more and more common. An optional feature of the MX-C381/C311 & MX-C380/C310 is the ability to scan several business cards at once, and send them to dedicated software for storage.

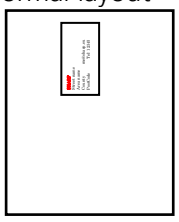
By adding the MX-BTX1, you can scan business cards with dimensions of 89-91mm x 51-55mm, making it quick and easy to scan all of the business cards you have accumulated.

With the Business card option installed, you simply feed the cards through the document feeder, and they are collected on the other side of the machine.

Copy	Image Send	Document Filing
✓	✓	✗

This scanner can also be used to create multiple paper copies of business cards.

Normal layout



Card Size Scan

Card layout

Note: Available at a later date

External Design

With its smart grey and black highlighting and 'grained' texture, the MX-C381/C311 & MX-C380/C310 have been designed to fit into the most modern and stylish of offices. Not only that, but since the latest A3 colour MFPs from Sharp boast the same stylish exterior, using both machines in a mixed deployment does not mean they will look out of place.

Control panel

The control panel of the MX-C381 & MX-C311 is virtually identical to its larger A3 equivalent machine, meaning that once you can use one machine, you can use them all.

- The black panel colour compliments the black and grey highlights of the main machine.
- The LCD panel can be customised with different background colours. The default background colour is black.

Image Quality

The ability to print and copy in colour is fast becoming ubiquitous in the modern office. Not only that, but as colour MFPs are used more and more to create highly important documents in the office, demand for higher quality colour output has never been higher.

Some manufacturers are no longer differentiating between 'Colour Capable' and 'Full Colour' machines, as they believe their machines offer good enough quality for the most demanding users.

The MX-C381/C311 & MX-C380/C310 offer excellent image quality.

High Resolution Printing

The more dots an MFP can lay down per inch (DPI), the more defined & refined the resulting image will be. The more refined the image, the more impressive the final document will look.

The MX-C381/C311 & MX-C380/C310 can print in true 1200x1200dpi.

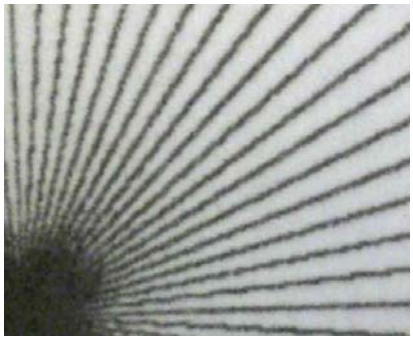
Images are clearer, with the contents easier and clearer to view.

600 x 600 dpi

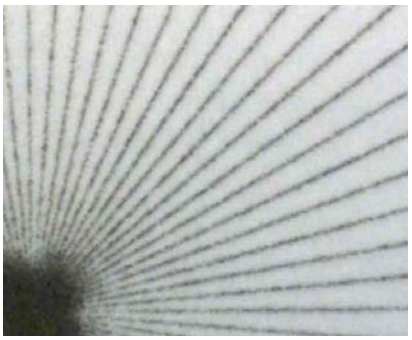
1200 x 1200 dpi

But it's not only photos and images that benefit from higher resolution printing. Fine lines and characters are also reproduced more clearly in higher resolution, resulting in better defined characters on the page, meaning a higher quality and therefore a more impressive document.

600 x 600 dpi



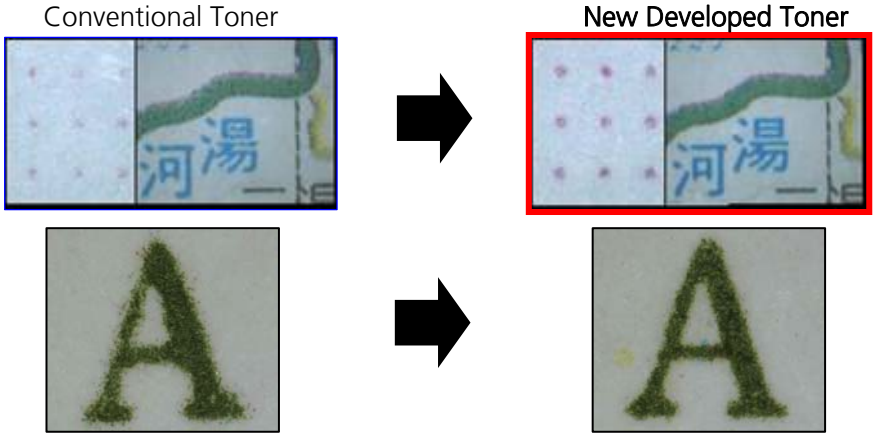
1200 x 1200 dpi



High Grade Toner

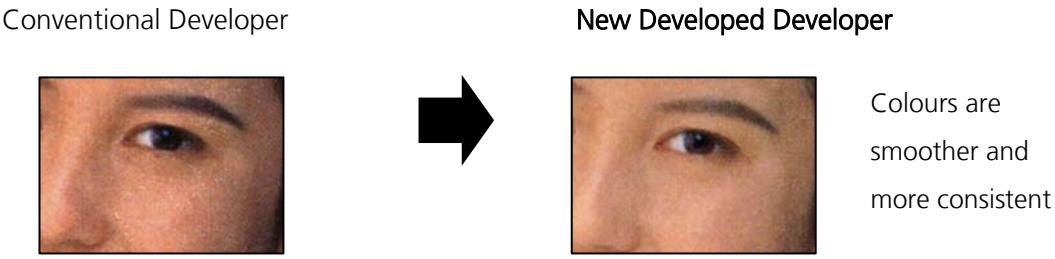
The toner particles used in the MX-C381/C311 & MX-C380/C310 have been refined compared to that of the past MX series such as MX-2300/2700. They are smaller, more uniform in terms of size & shape and can be distributed more evenly on the paper.

As a result, dots, fine lines & characters are better reproduced, and texture is less granulated.



New Developer

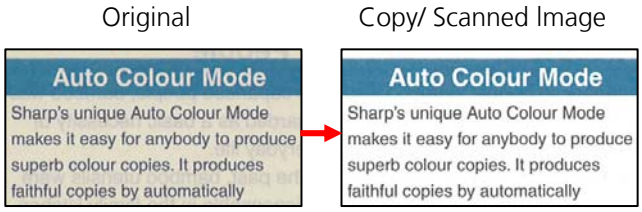
A developer also helps improve the image quality through smoother distribution of the toner on the paper.
Note: This developer is same as the developer for MX-6201N/ MX-7001N.



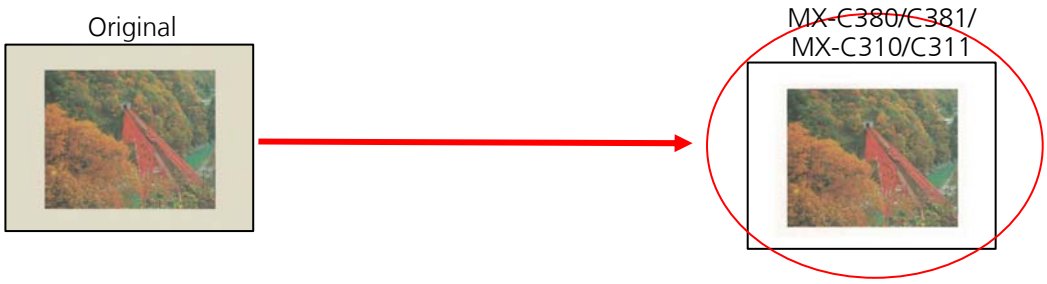
New Toner + New Developer = Improved Consistent Image Quality

Suppressed Background

If your original document has a light (or off-white) background, it is possible to automatically create not only copies but also scans with whiter, brighter backgrounds with the background suppress function.


Original
Copy/ Scanned Image
Auto Colour Mode
Sharp's unique Auto Colour Mode makes it easy for anybody to produce superb colour copies. It produces faithful copies by automatically
Auto Colour Mode
Sharp's unique Auto Colour Mode makes it easy for anybody to produce superb colour copies. It produces faithful copies by automatically

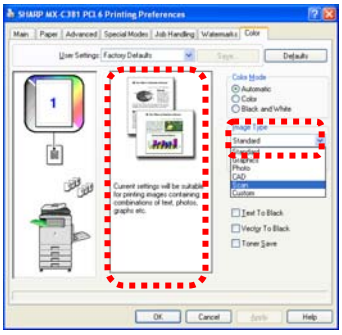
Using this function on photographs or newspapers, the MX-C381/C311 & MX-C380/C310 can also create almost same colour image as the original one.

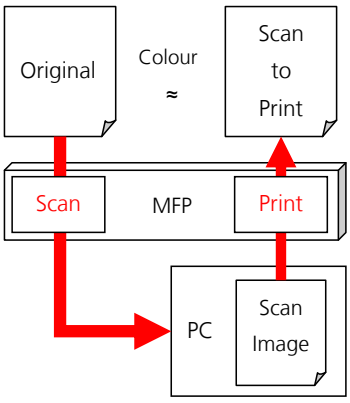


Note the improved accuracy of the image tones compared to the original, despite the improved background colour.

Scan to Print

A Print Processing mode for scanning images is a new feature of the MX-C381/C311 & MX-C380/C310. When using this mode, users can obtain a print image that is extremely close in colour to the original image.





Usability

Generally, the more complicated and technologically capable a device is, the more complicated it is to use. The ramifications of this for the MFP market include:

- User frustration
- Training
- Users not understanding the capabilities of the MFP, therefore not getting the best out of it
- Lost clicks

The MX-C381 & MX-C311 include a fully customisable 8.5" colour LCD touch panel.

- Access to all functions is clear and easy
- Current job settings are visible at all times
- Access to the job change menus is clearly marked
- Current job and device status means it is easy to both manage and administer the MFP

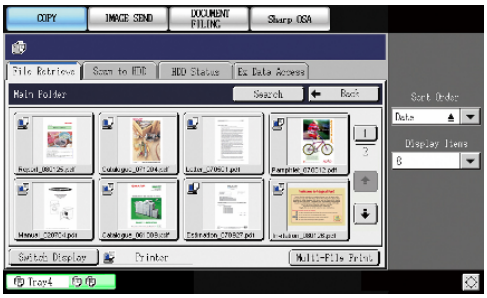
Whilst the operation of the MX-C381 & MX-C311 has been based on previous models as far as possible (if you can use one Sharp device, you can use these) there have been some updates designed to make them as easy as possible to use.

Whilst the MX-C380 & MX-C310 have a smaller 4.3" panel, its screen functionality makes it almost as easy to use as the larger screen.

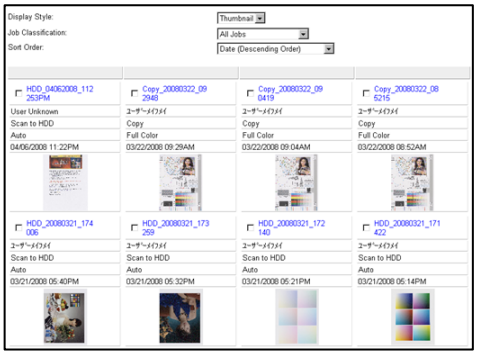
Image Preview (Document Filing)

Managing the data stored using the Document Filing function on the MX-C381/C311 & MX-C380/C310 has also become much easier.

- The first page of the stored file is saved as a thumbnail
- Those thumbnails can be checked on the LCD panel and/or web page by the user (In the case of MX-C380/C310, users can view thumbnails on the web page only.)
- It is easy to browse a folder, and choose the required file based on its contents, not just the file name
- Waste print-outs are reduced, saving money & the environment



Front Panel



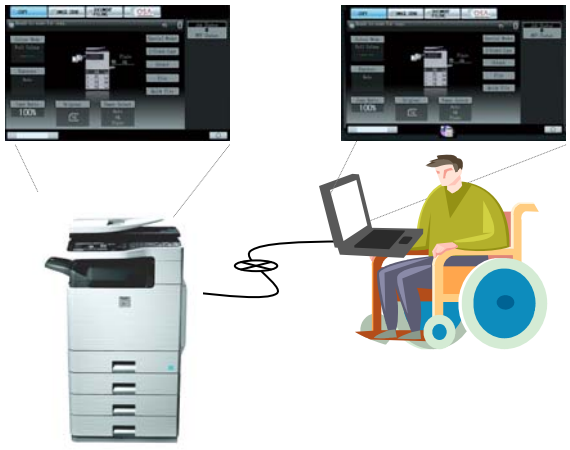
Web page (Home page)

Remote Front Panel

The control panel for most MFPs is fixed, making it difficult for some people to use the MFP.

To combat this, Sharp has developed the Remote Front Panel which shows the full operation panel on a PC as is on the MFP, making it easy to control remotely. Through Remote Access Interface, service helpdesk or disabled user can connect with the MFP.

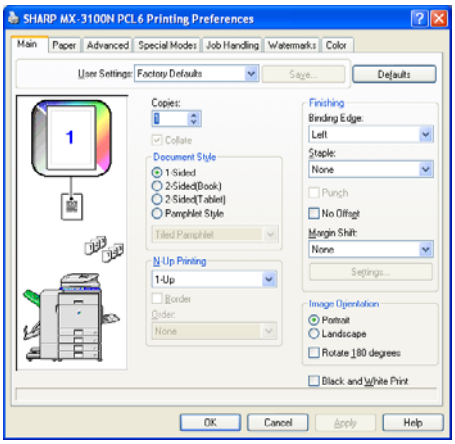
Remarks: It is necessary to install the remote software to users' PC. (Recommended VNC Software: RealVNC, TinyVNC, PAU Ver5)



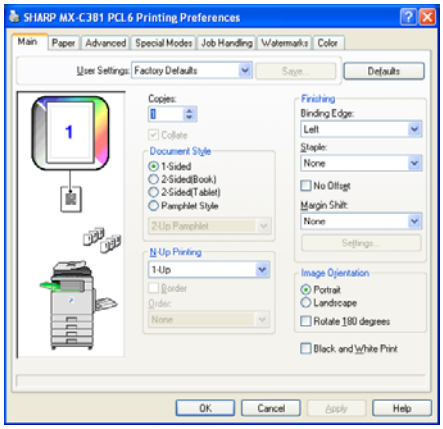
Other uses include:

- Training – the user panel can be shown to a whole room using a projector, so there is no need for all of the trainees to group around the front of the MFP.
- Helpdesk support – help a user navigate using Remote Front Panel, so no need to visit the MFP
- Remote Administration – for example, an admin at a company HQ does not need to visit the branch office to manage the MFP
- Sharp OSA developers can support their software remotely

Common Drivers*



MX-3100/2600N



MX-C381/C311 / MX-C380/C310

Sharp uses a standardised and simple driver design, which means that

- If you can use one Sharp printer, you can use any other Sharp printers
- Only one driver disk is needed to install drivers for any of our colour range (MX-2300N to MX-7001N inclusive), making drivers easy to manage

* The available features and/or optional configuration differ depending on machine. Therefore, perfect compatibility is not given.

■ Productivity

Not only are the MX-C381/C311 & MX-C380/C310 incredibly easy to use, they are also very efficient – helping you to achieve the best productivity possible from your MFP.

- Fast scanning speed

  The MX-C381/C311 and MX-C380/C310 can scan at speeds of up to 33opm (200dpi) in both colour and mono.
  No more waiting next to the machine for your originals to complete scanning!

- Fast output speed

  The output speed of the MFP is amongst the best in class, meaning that every job you need the MX-C381/C311 & MX-C380/C310 to do, it will be done fast.

  Combine this with the fast warm-up time of up to 90 seconds, and fast first copy out times (8.9 sec* colour & 8.0 sec* mono) and you can see that everything has been designed with efficiency in mind.
  *Measurement condition
  "Original Glass" "Feeding A4R paper from the main unit tray 1" "Auto Colour Selection" "Polygon in rotation"

- Gigabit Ethernet (1000Base-T)

  As well as scanning and output speed, the speed of the network connection has also been improved with the addition of Gigabit Ethernet – so your print jobs will reach the MFP faster, and your scan jobs will be sent much more quickly as well.

- Direct SMTP

  When using Internet Fax, if both the sending and receiving machines are capable of operating by Direct SMTP, the Fax can be transmitted without going through the mail server. This eliminates a potential bottle neck, and since the Fax is transmitted directly, it takes less time to arrive.

- Fax Inbound routing & preview

  When you receive a fax, it can either be printed out immediately, forwarded on to a user, who can decide whether it should be printed at their own PC, or it can be stored on your MFP and previewed on the LCD panel, ensuring that junk faxes are not printed, saving you time and money.

Connectivity

There are so many different environments and systems in use in today's office that an MFP needs to be compatible with as many as possible.

The MX-C381/C311 & MX-C380/C310 have been developed with this in mind.

Sharp is a founder member of the **SAP Printer Vendor Program**. SAP device types for all of our devices will be created to provide connectivity with SAP.

WHQL (Windows Hardware Quality Labs) testing ensures full compatibility with Windows systems.

Sharp is a Citrix Technology Partner, giving us access to testing resources, technical support and other Citrix development tools.

Compatibility with the CUPS (Common Unix Printing System) ensures you can use your MFP with both Unix and Linux.

And not only can our devices work with all these software vendors, the MX-C381/C311 & MX-C380/C310 can communicate with them exceptionally quickly over the latest networking technologies:

- Standard Gigabit Ethernet (1000Base-T)
- IPv6

Microsoft XPS

The MX-C381/C311 & MX-C380/C310 are compatible with the latest formats, including Microsoft XPS.

What is XPS?

XPS (XML Paper Specification) is a new file format from Microsoft intended for published documents, where once published, the document cannot be changed. It is similar in function to Adobe PDF.

XPS is important because compatibility is built into Vista, the latest version of Windows, (separate downloads are available for previous versions) therefore it will be usable for a lot of people in the near future.

Benefits over PDF file format

- All fonts are embedded in the document
- Colour handling has been improved, with support for systems such as ICC profiling
- Support for a wider gamut of colours
- Compatibility with Microsoft's DRM software (RMS / Rights Management Software), which in turn is supported by Microsoft SharePoint.

Printing XPS files

It is possible to print XPS files using PCL drivers, but it is not ideal. When printing via PCL, the data is effectively converted into a Bitmap, which affects gradation and transparency settings within the data.

File Formats

The MX-C381/C311 & MX-C380/C310 are compatible with a wide variety of document file formats:

	Direct Print	Scan
Microsoft XPS	Opt*	✔
PDF	✔ **	✔
Encrypted PDF	✔ **	✔
JPEG	✔	✔
TIFF	✔	✔

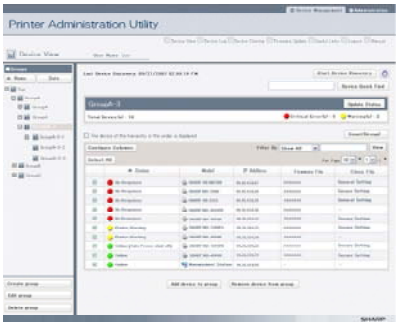
*MX-PUX1 expansion kit and MX-SMX3 (expansion memory board) are required.
** MX-PKX5 is required for MX-C380/C310.

PAU 5 (soon-to-be-released)

Sharp Printer Administration Utility (PAU) 5 is the latest version of Sharp's own web-based administration utility. It will allow administrators to manage their fleet of MFPs quickly and easily, without having to physically visit the MFP.

PAU 5 introduces several new features over PAU 4, including:

- Firmware download
- Remote Operation panel
- Click Count Export (CSV)
- Device Cloning
- Service Reports



Other improvements include:

- New user interface
- Tree navigation structure
- Local Authentication database
- Three user types (Service, Advanced, General), with varying permissions

Function	Service User	Advanced User	General User
System Settings Cloning	Yes	Yes	No
Service Reports	Yes	No	No
Firmware download	Yes	No	No
Remote Operation Panel	Yes*	Yes*	Yes*
PAU System Configure	Yes	Yes	No
Driver Download	Yes	Yes	Yes
Driver Registration	Yes	Yes	No
Device View	Yes	Yes	Yes
Device Discovery	Yes	Yes	No
Serveice Aleart	Yes	Yes	No
Click count export	Yes	Yes	No

*) The Remote Operation Panel feature will allow users to access depending on the system settings for the Remote Operation Panel at the MFP side.

■ Save Money

All companies are interested in ways to save money – so how can the MX-C381/C311 & MX-C380/C310 help?

Duplex Printing

The MX-C381/C311 & MX-C380/C310 come with duplex as standard

By printing and copying as many documents as possible on both sides of the paper, your paper purchasing costs could be halved.

Fax Management

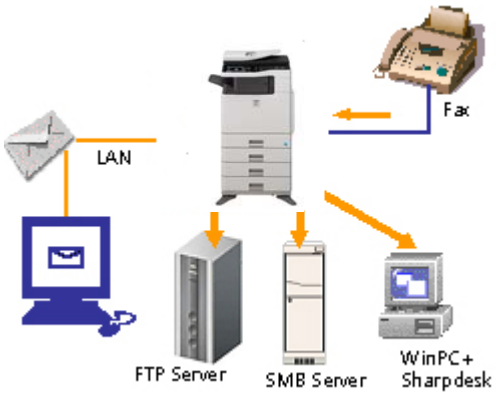
With the advanced Fax management functions of the MX-C381/C311 & MX-C380/C310, you need never print a fax again, whether receiving or sending.

Inbound routing - Incoming faxes are sent via email to a specified recipient or sent as tiff data to servers/PCs, so only required faxes need be printed, and junk faxes are not printed.

PC-Fax - Fax electronic documents direct from your PC – no need to print them first.

Fax Thumbnail* and preview function also enables incoming faxes to be previewed prior to printing.

Of course, if you do need to print out a fax, you can always print it duplex!



* Thumbnail only available on MX-C381/C311

Save Electricity, Save the Environment

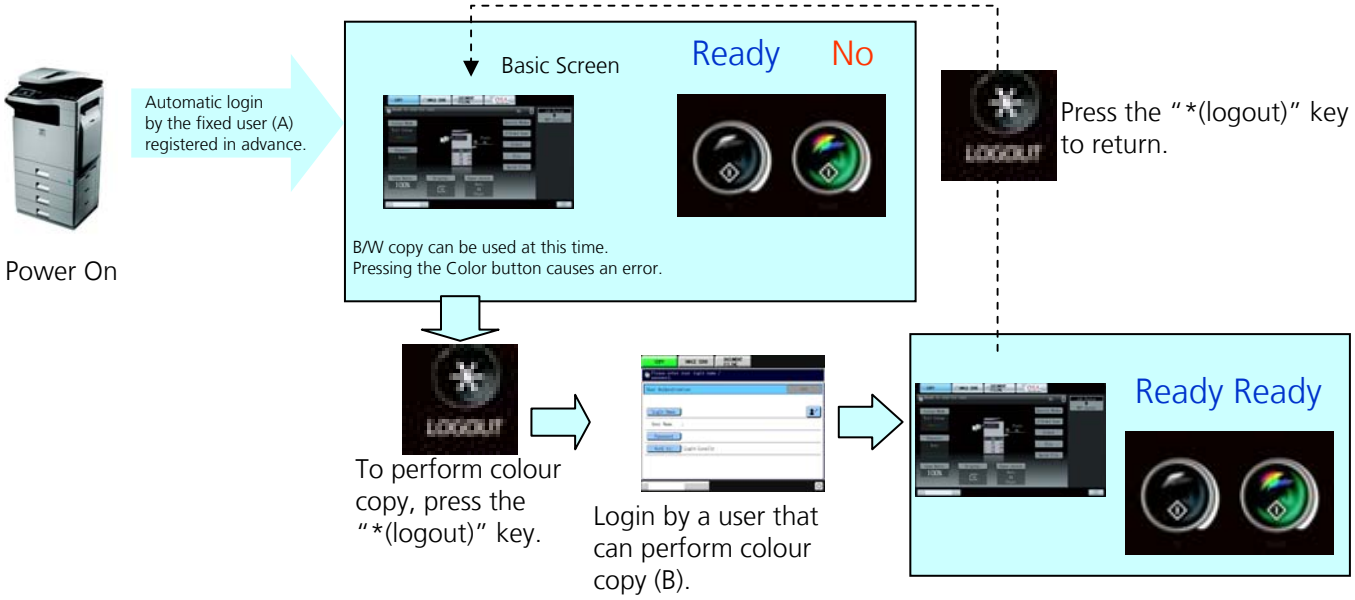
The MX-C381/C311 & MX-C380/C310 can be set to go into power save mode after a set period of inactivity.
In addition to this, there is a power-save button which, when pressed, forces the MFP into power save mode immediately.

Control Colour Costs

The benefits of using colour in your business documents is well known, but some companies have not introduced colour MFPs to their offices due to a risk of increased costs as a result of increased colour output.

The simple answer to this is to restrict which users can produce colour documents.

Each user can have different levels of access to the MFP. By using this feature, you can set it up so that anyone can produce black and white output, but only registered users with colour access can log onto the MFP and produce colour documents.



A maximum of 1,000 accounts can be registered.

Security

Most IT departments are aware of the security issues of their networks, and take appropriate measures to protect data stored on their systems.

But how many are aware of the dangers posed by an MFP?

Most MFPs fitted with a hard drive can automatically store copies of any jobs it processes on its hard drive, whether they be print, copy, scan or fax jobs and they can stay on the MFP's HDD for years.
How many sensitive and confidential documents pass through your MFP?

- Financial data
- Business documentation
- Tenders
- Product specifications
- Employment data
- The list is endless

Now imagine this data was unsecured.

The MX-C381/C311 & MX-C380/C310 employ Sharp's unsurpassed expertise in security to ensure your data remains safe – whoever has access to your MFP:

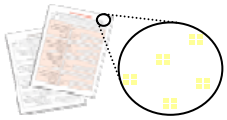
- Secure data during communications with the MFP
  - HTTPS / SSL / IPsec network data encryption
  - IP / MAC address filtering
- Secure data stored on the MFP
  - Encrypt data during processing
  - Overwrite data on HDD once processing is complete
  - Encrypt the HDD
  - Automatically delete files after a set period
- Secure data once it leaves the MFP
  - PIN printing
  - Document control
  - Encrypted PDF support

Many of these features are unique in the A4-class of machines.

Output by the MFP

Scanned documents can be scanned in Encrypted PDF format, meaning a password must be entered before the document can be opened.

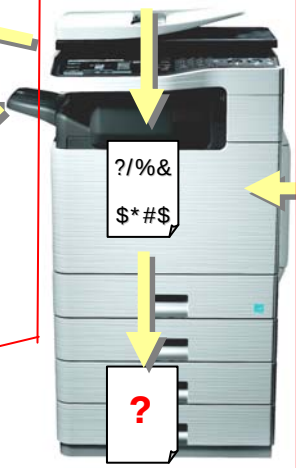
PIN Printing means that no printouts are left lying on the MFP, as the user must enter a PIN before the document is printed.



Document Control means that any document output with DC patterns cannot then be printed or scanned by another Sharp MFP with DC installed.*

On the MFP

Data on the HDD (and being processed) can be encrypted.*

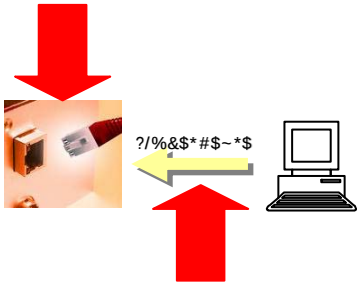


Files stored on the HDD can be automatically deleted on a regular basis

Once processed, data can be overwritten with random data.*

Input to the MFP

IP & MAC address filtering restricts access to the MFP over the network.

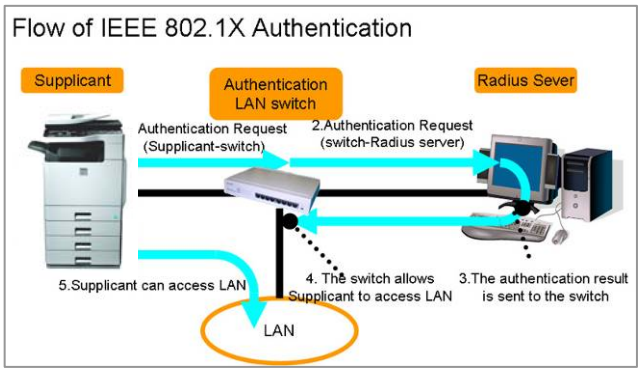


SSL / IPsec encryption protects communication over the network.

* Optional Data Security Kit required

Security feature: IEEE802.1X

IEEE802.1X is a LAN standard established by the IEEE 802 committee. It is a technology used to authenticate hardware connected to the network, therefore its main function is to prevent unauthorised machines from gaining access to your network.



The MX-C381/C311 & MX-C380/C310 support IEEE802.1X, maintaining the high level of security your network requires.

There are broadly three techniques for preventing unauthorised access to your network.

1. Authentication on your LAN switches
2. DHCP server system
3. Personal firewall system

Among the above, type 1 uses IEEE802.1X. By preventing unauthorised access at the network hardware level (rather than at the server or computer level), IEEE802.1X is seen as providing a higher level of security, and it is often used at major companies or public offices.

■ Office Integration

The trend towards office automation is clear. Customers want to make their offices as efficient as possible, including their document output infrastructure.

There is a demand for document solutions that can be integrated with either new or existing solutions, for archiving, document workflow, accounting or scanning.

Sharp Open Systems Architecture is perfect for the job!

Sharp OSA makes it possible for third-party software developers to create custom applications that link the MFP to software programs on a server or PC, giving you the ability to create your own solutions specific to your own needs.

The MX-C381/C311 & MX-C380/C310 are compatible with the latest version of Sharp OSA (3.0), which makes it even easier to customise your MFP and integrate it into your office workflow. Plus, by including Sharp OSA on both A3 and A4 devices, it is possible to use Sharp OSA applications across your fleet, even in mixed deployments.

Among Sharp OSA 3.0's highlights are:

- A fully customisable User Interface (UI)
- Code description is based on standard HTML – a UI can be created with general coding skills
- Standard expansion technologies can be easily supported (such as Ajax, CSS & Flash)
- An existing Partner program, with many large developers already working with Sharp OSA means that the right integrated solution could already be available.

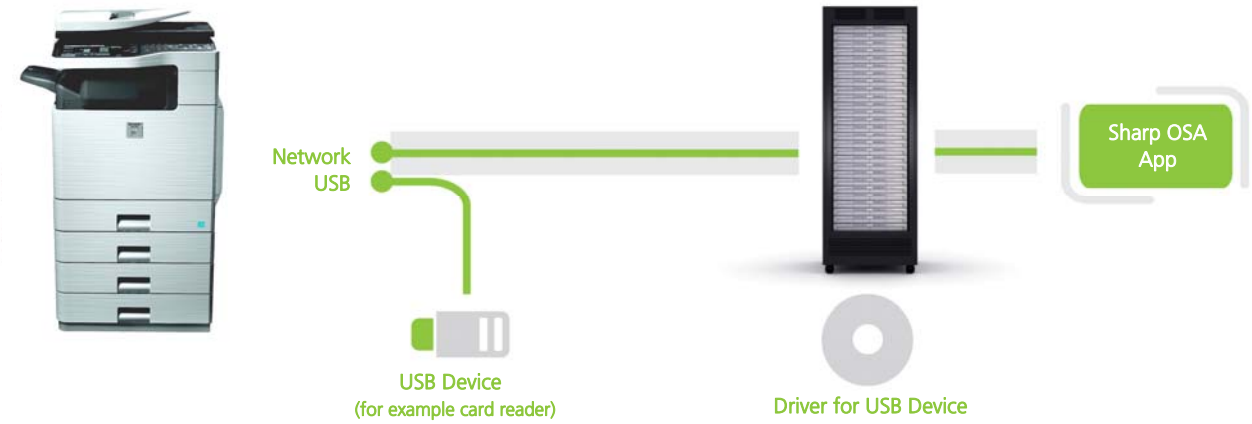
AJAX: A group of interrelated web development techniques used for creating interactive web applications or rich Internet applications. With Ajax, web applications can retrieve data from the server asynchronously in the background without interfering with the display and behavior of the existing page

CSS: A stylesheet language used to describe the presentation of a document written in a markup language. Its most common application is to style web pages written in HTML and XHTML.

Flash: A set of multimedia technologies. Flash technology has become a popular method for adding animation and interactivity to web pages.

New features of Sharp OSA 3.0 include:

- USB device expansion
  USB devices that are not supported by the MFP itself can be used in Sharp OSA mode, using the Windows drivers installed on the Sharp OSA server.



- Trial Mode
  In order to allow a customer to assess Sharp OSA solution, a trial mode can be set up, which allows full functionality for a limited period. On the MX-C381/C311 & MX-C380/C310, this limit has been set at total 19,000 pages. (scanned/ printed/ sent)

- Job Build Mode
  The function where a particularly large original can be split into sections for scanning (if the number of pages in the document exceeds the capacity of the document feeder) can now be used in Sharp OSA solutions.

- Sending Data via HTTP / SMB
  Previous versions of Sharp OSA were limited to the FTP protocol for the transmission of data, but many Administrators don't like FTP to be used on their networks. Sharp OSA 3.0 can also transmit data using the HTTP and SMB protocols, making it suitable for almost all environments.

This allows for more simple control, using the same security setting used for web browsing (HTTP).

Environment

Environmental regulations

- RoHS

  A European directive, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

- WEEE

  Waste Electrical and Electronic Equipment regulations aimed at reducing the amount of waste going to landfill and improving recovery and recycling rates.

- Energy Star

  Energy Star is a label for energy efficient products with worldwide recognition. The Energy Star programme was introduced to Europe in 2002 as a voluntary label for computers, monitors, printers, fax machines, scanners, copiers and multifunctional machines. New specifications were introduced in 2007 which ensure that the Energy Star represents only the markets most energy efficient products.

The MX series are designed with the environment in mind and based on Sharp's policy of becoming a totally environmentally friendly company.

- Common platform

  The MX series has been developed with "Common platform" concept, which utilises common mechanical parts, boards, consumables, software and controllers as much as possible. This fact is important for the overall company's activities such as stock management, production, logistics, technical training, etc. This means less power is required to sustain the company's activities and total energy consumption is reduced, as everything is Sharp.

- Recyclable plastic

  The material name and characteristics are mentioned on all plastic parts and cabinet for recycling. Also labels for caution or operation are reduced as much as possible and instead of these messages are now embossed on plastic.

Competitive Comparison

The competitive analysis is designed to promote the features of the MX-C381/C311 & MX-C380/C310 in terms of their competitive advantages.

Content Items and Order:

- Sharp MX-C381/C311 & MX-C380/C310 Vs. HP CLJ CM3530 MFP
- Sharp MX-C381/C311 & MX-C380/C310 Vs. HP CLJ CM4730 MFP
- Sharp MX-C381/C311 & MX-C380/C310 Vs. Lexmark X782e
- Sharp MX-C381/C311 & MX-C380/C310 Vs. Konica Minolta Magicolor 4690MF
- Sharp MX-C381/C311 & MX-C380/C310 Vs. Oki C5550 MFP
- Sharp MX-C381/C311 & MX-C380/C310 Vs. Samsung CLX-8380ND
- Sharp MX-C381/C311 & MX-C380/C310 Vs. Xerox Phaser 8860MFP

The above list is covered by one page per product vs. product comparisons in this section. The feature advantages are translated into application benefits. These points can be used to describe the sales arguments on what the strengths of the MX -C381/C311 and MX-C380/C310 are.

Sharp MX-C381/C311 & MX-C380/C310 Vs HP CLJ CM3530 MFP

Manufacturer	Sharp		HP
Model	MX-C381/380	MX-C311/310	CLJ CM3530 MFP
Launch Date	November 2008		November 2008
Also Sold As	N/A		N/A
Multifunctionality	**Std**		**Std**
Network Printer	Std		Std
Network Scanning	Std		Std
Fax	Opt		Opt
Document Filing	Std *1		No
Base Engine	Desktop		Desktop
Paper Max. Size	A4		A4
Total Cassettes Std.	1		1
Total Cassettes Max.	4		2
Total Sheets Std.	600		350
Total Sheets Max.	2,100		850
No of sheets (Bypass)	100		100
Max gsm (Trays/Bypass)	105 / 209		220 / 220
Duplex	Std (105gsm)		Std
Warm up time (secs)	90s		
Job Programs	Yes		No
Account Numbers	1,000		
Footprint (WxD)	560 x 438		515 x 519
Toner Life (Mono)	10k (5%)		10.5k (5%) *2
Toner Life (Col)	10k (5%)		7k (5%)
Copier	**Std**		**Std**
Copy/min. (cpm)(B/W)	38	31	30
Copy/min. (cpm)(Col)	38	31	30
FCOT (B/W)	8s		11.3
FCOT (Col)	8.9s		12.5
Max. Original Size	A4		A4
Max. Qty. Select	999		999
Scanner Resolution	600x600		600x600
Zoom Range	50-200%		25 – 400%
Std. Mem. Mb	768MB	512MB	512mb (shared)
Max. Mem. Mb	768MB	512MB	1GB (shared)
Hard Drive	Std (80GB)		Std (80GB)

Manufacturer	Sharp		HP
Model	MX-C381/380	MX-C311/310	CLJ CM3530 MFP
Document Feeder	**Std**		**Std**
Type	RSPF		ADF
Capacity (sheets)	50		50
Printer	**Std**		**Std**
Print/min. (ppm)(B/W)	38	31	30
Print/min. (ppm)(Col)	38	31	30
Print Resolution (Equivalent)	1200x1200		1200x600
Postscript	C381/311: Std, C380/310: Opt		Std
PCL	Std		Std
XPS	Opt		No
Win NT/2000/XP/2003	Std		Std
Unix / Linux	Std		Std
Other Systems	SAP		Citrix
Processor MHz	1GHz	800MHz	515MHz
Printer Std. Mem. Mb	1GB	512MB	512mb (shared)
Printer Max. Mem. Mb	2GB	1.5GB	1GB (shared)
1000Base-T	Std		Opt
10/100BaseT	Std		Std
USB	Std		Std
Fax	**Opt**		**Opt**
Type	Super G3		Super G3
PC-Fax	Yes		Yes
iFax	Opt		Opt
Fax Broadcast	500 addresses		100 addresses
Document Filing	**Std**		No
Pages Limit	5,500		N/A
Files Limit	3,000		N/A
Network Scanning	**Std**		Std
Max. Speed	33opm (colour & mono)		
Max. Resolution	600x600		600x600
Destinations	USB, SMB, FTP, Email, PC		Email, Net Folder, workflow
Functionality	Sharpdesk (Option)		Digital Sending S/W (opt)
Finishing	Opt		Opt
No of Finisher Sheets (max)	280		250
Auto Stapler	Yes		No *3
Sheets Stapled	30		20 *3
Hole Punch	No		No

*1 MX-C310/380 can only store print jobs. MX-C311/381 have full document filing capabilities

*2 High capacity cartridge has life of 10.5k. Std cartridge is 5k.

*3 The CLJ CM3530fs includes a 'convenience stapler'. This is effectively an offline stapler on the side of the MFP that must be used manually after the document has been printed

Strengths of MX-C381/C311 & MX-C380/C310	Strengths of HP CLJ CM3530 MFP
✓ Faster output	✓ Heavier paper support
✓ Document Filing function	✓ Slightly longer life black toner cartridge (10.5k for the long life unit)
✓ Higher std & max. paper capacity	✓ Greater copy zoom range
✓ More paper sources available	
✓ Job programs	
✓ Smaller footprint	
✓ Longer life colour toner cartridges	
✓ Faster FCOT (both colour and mono)	
✓ Memory not shared between print and copy functions	
✓ More copier memory (38ppm MFPs only)	
✓ More printer memory as std (38ppm MFPs only)	
✓ High max printer memory (all MFPs)	
✓ Higher print resolution	
✓ XPS functionality	
✓ Faster processor	
✓ Gigabit Ethernet as std	
✓ Scan to / print from USB	
✓ Higher output capacity	
✓ Online (and higher capacity) stapling	

Sharp MX-C381/C311 & MX-C380/C310 Vs HP CLJ CM4730 MFP

Manufacturer	Sharp		HP
Model	MX-C381/380	MX-C311/310	CLJ CM4730 MFP
Launch Date	November 2008		April 2007
Also Sold As	N/A		N/A
Multifunctionality	**Std**		**Std**
Network Printer	Std		Std
Network Scanning	Std		Std
Fax	Opt		Opt
Document Filing	Std*1		No
Base Engine	Desktop		Desktop
Paper Max. Size	A4		A4
Total Cassettes Std.	1		3
Total Cassettes Max.	4		3
Total Sheets Std.	600		1,600
Total Sheets Max.	2,100		1,600
No of sheets (Bypass)	100		100
Max gsm (Trays/Bypass)	105 / 209		120 / 220
Duplex	Std (105gsm)		Std
Warm up time (secs)	90s		165s
Job Programs	Yes		No
Account Numbers	1,000		
Footprint (WxD)	560 x 438		788 x 639
Toner Life (Mono)	10k (5%)		12k (5%)
Toner Life (Col)	10k (5%)		12k (5%)
Copier	**Std**		**Std**
Copy/min. (cpm)(B/W)	38	31	30
Copy/min. (cpm)(Col)	38	31	30
FCOT (B/W)	8s		11s
FCOT (Col)	8.9s		11s
Max. Original Size	A4		A4
Max. Qty. Select	999		999
Scanner Resolution	600x600		600x600
Zoom Range	50-200%		25-400%
Std. Mem. Mb	768MB	512MB	448MB (shared)
Max. Mem. Mb	768MB	512MB	512MB (shared)
Hard Drive	Std (80GB)		Std (40GB)

Manufacturer	Sharp		HP
Model	MX-C381/380	MX-C311/310	CLJ CM4730 MFP
Document Feeder	**Std**		**Std**
Type	RSPF		ADF
Capacity (sheets)	50		50
Printer	**Std**		**Std**
Print/min. (ppm)(B/W)	38	31	30
Print/min. (ppm)(Col)	38	31	30
Print Resolution (Equivalent)	1200x1200		600x600
Postscript	C381/311: Std, C380/310: Opt		Std
PCL	Std		Std
XPS	Opt		No
Win NT/2000/XP/2003	Std		Std
Unix / Linux	Std		Std
Other Systems	SAP		
Processor MHz	1GHz	800MHz	533MHz
Printer Std. Mem. Mb	1GB	512MB	448MB (shared)
Printer Max. Mem. Mb	2GB	1.5GB	512MB (shared)
1000Base-T	Std		Opt
10/100BaseT	Std		Std
USB	Std		Std
Fax	**Opt**		**Opt**
Type	Super G3		Super G3
PC-Fax	Yes		Yes
iFax	Opt		Opt
Fax Broadcast	500 addresses		100 addresses
Document Filing	**Std**		**No**
Pages Limit	5,500		N/A
Files Limit	3,000		N/A
Network Scanning	**Std**		**Std**
Max. Speed	33opm (colour & mono)		30opm
Max. Resolution	600x600		600x600
Destinations	USB, SMB, FTP, Email, PC		Email
Functionality	Sharpdesk (Option)		
Finishing	Opt		Opt
No of Finisher Sheets (max)	280		500
Auto Stapler	Yes		Yes
Sheets Stapled	30		30
Hole Punch	No		No

*1 MX-C310/380 can only store print jobs. MX-C311/381 have full document filing capabilities

Strengths of MX-C381/C311 & MX-C380/C310	Strengths of HP CLJ CM4730 MFP
✓ Faster output	✓ More paper cassettes as std
✓ Document Filing function	✓ Higher std paper capacity
✓ More paper cassettes available	✓ Heavier paper support
✓ Higher max. paper capacity	✓ Higher capacity toner cartridges
✓ Faster warm-up time	✓ Wider zoom range
✓ Job programs available	✓ Higher output capacity through finisher
✓ Smaller footprint	✓ Mail-bin stacker available
✓ Faster FCOT (black & colour)	
✓ Faster processor	
✓ More memory (for both print & copy)	
✓ Print and copy memory is separate	
✓ Larger HDD	
✓ Higher print resolution	
✓ XPS support (option)	
✓ Gigabit Ethernet is std	
✓ Faster scanning	
✓ More scan destinations	
✓ Fax can be broadcast to more destinations	

Sharp MX-C381/C311 & MX-C380/C310 Vs Lexmark X782e

Manufacturer	Sharp		Lexmark
Model	MX-C381/380	MX-C311/310	X782e
Launch Date	November 2008		Jan 2007
Also Sold As	N/A		N/A
Multifunctionality	**Std**		**Std**
Network Printer	Std		Std
Network Scanning	Std		Std
Fax	Opt		Std
Document Filing	Std*1		Std
Base Engine	Desktop		Console
Paper Max. Size	A4		A4
Total Cassettes Std.	1		3
Total Cassettes Max.	4		3
Total Sheets Std.	600		1,600
Total Sheets Max.	2,100		1,600
No of sheets (Bypass)	100		100
Max gsm (Trays/Bypass)	105 / 209		199 / 199
Duplex	Std (105gsm)		Std
Warm up time (secs)	90s		
Job Programs	Yes		No
Account Numbers	1,000		
Footprint (WxD)	560 x 438		679 x 584
Toner Life (Mono)	10k (5%)		15k (5%)*2
Toner Life (Col)	10k (5%)		15k (5%)*2
Copier	**Std**		**Std**
Copy/min. (cpm)(B/W)	38	31	38
Copy/min. (cpm)(Col)	38	31	33
FCOT (B/W)	8s		11s
FCOT (Col)	8.9s		13s
Max. Original Size	A4		A4
Max. Qty. Select	999		999
Scanner Resolution	600x600		600 x 600
Zoom Range	50-200%		25-400%
Std. Mem. Mb	768MB	512MB	768MB (shared)
Max. Mem. Mb	768MB	512MB	768MB (shared)
Hard Drive	Std (80GB)		Std (40GB)

Manufacturer	Sharp		Lexmark
Model	MX-C381/380	MX-C311/310	X782e
Document Feeder	**Std**		**Std**
Type	RSPF		RADF
Capacity (sheets)	50		50
Printer	**Std**		**Std**
Print/min. (ppm)(B/W)	38	31	38
Print/min. (ppm)(Col)	38	31	33
Print Resolution (Equivalent)	1200x1200		1200x1200
Postscript	C381/311: Std, C380/310: Opt		Std
PCL	Std		Std
XPS	Opt		No
Win NT/2000/XP/2003	Std		Std
Unix / Linux	Std		Std
Other Systems	SAP		AS/400, Novell
Processor MHz	1GHz	800MHz	800MHz
Printer Std. Mem. Mb	1GB	512MB	768MB (shared)
Printer Max. Mem. Mb	2GB	1.5GB	768MB (shared)
1000Base-T	Std		Opt
10/100BaseT	Std		Opt
USB	Std		Std
Fax	**Opt**		**Std**
Type	Super G3		Super G3
PC-Fax	Yes		No
Fax Broadcast	500 addresses		No
iFax	Opt		No
Document Filing	**Std**		**Std**
Pages Limit	5,500		N/A
Files Limit	3,000		N/A
Network Scanning	**Std**		**Std**
Max. Speed	33opm (colour & mono)		
Max. Resolution	600x600		600x600
Destinations	USB, SMB, FTP, Email, PC		Email, FTP, HDD, USB
Functionality	Sharpdesk (Option)		
Finishing	**Opt**		**No**
No of Finisher Sheets (max)	280		N/A
Auto Stapler	Yes		N/A
Sheets Stapled	30		N/A
Hole Punch	No		N/A

*1 MX-C310/380 can only store print jobs. MX-C311/381 have full document filing capabilities

*2 6k & 10k cartridges also available

Strengths of MX-C381/C311 & MX-C380/C310

- ✓ Faster colour output (38ppm machines only)
- ✓ Higher max. paper capacity
- ✓ More paper trays available
- ✓ Heavier paper support (Bypass only)
- ✓ Job programs
- ✓ Smaller footprint
- ✓ Faster FCOT (black & colour)
- ✓ Memory not shared between print & copy
- ✓ Larger HDD
- ✓ XPS support (option)
- ✓ More std print memory (38ppm machines only)
- ✓ Higher max. print memory available
- ✓ Networking is std
- ✓ Gigabit Ethernet is std
- ✓ PC-Fax & I-Fax available
- ✓ Fax can be broadcast to more destinations
- ✓ Finishing available

Strengths of Lexmark X782e

- ✓ Analogue fax is std
- ✓ More paper cassettes std
- ✓ Higher paper capacity as std
- ✓ Higher capacity toner cartridges
- ✓ Wider zoom range

■ Sharp MX-C381/C311 & MX-C380/C310 Vs Konica Minolta Magicolor 4690MFP

Manufacturer	Sharp		Konica Minolta
Model	MX-C381/380	MX-C311/310	Magicolor 4690MF
Launch Date	November 2008		August 2008
Also Sold As	N/A		N/A
Multifunctionality	**Std**		**Std**
Network Printer	Std		Std
Network Scanning	Std		Std
Fax	Opt		Std
Document Filing	Std*1		No
Base Engine	Desktop		Desktop
Paper Max. Size	A4		A4
Total Cassettes Std.	1		1
Total Cassettes Max.	4		2
Total Sheets Std.	600		350
Total Sheets Max.	2,100		850
No of sheets (Bypass)	100		100
Max gsm (Trays/Bypass)	105 / 209		90 / 210
Duplex	Std (105gsm)		Std (90gsm)
Warm up time (secs)	90s		58s
Job Programs	Yes		No
Account Numbers	1,000		No
Footprint (WxD)	560 x 438		539 x 590
Toner Life (Mono)	10k (5%)		8k (5%)
Toner Life (Col)	10k (5%)		8k (5%)
Copier	**Std**		**Std**
Copy/min. (cpm)(B/W)	38	31	24
Copy/min. (cpm)(Col)	38	31	24
FCOT (B/W)	8s		25s
FCOT (Col)	8.9s		28s
Max. Original Size	A4		A4
Max. Qty. Select	999		99
Scanner Resolution	600x600		600x600
Zoom Range	50-200%		25-400%
Std. Mem. Mb	768MB	512MB	256MB (shared)
Max. Mem. Mb	768MB	512MB	256MB (shared)
Hard Drive	Std (80GB)		No

Manufacturer	Sharp		Konica Minolta
Model	MX-C381/380	MX-C311/310	Magicolor 4690MF
Document Feeder	**Std**		**Std**
Type	RSPF		RADF
Capacity (sheets)	50		50
Printer	**Std**		**Std**
Print/min. (ppm)(B/W)	38	31	24
Print/min. (ppm)(Col)	38	31	24
Print Resolution (Equivalent)	1200x1200		2400x600
Postscript	C381/311: Std, C380/310: Opt		Host based
PCL	Std		Host based
XPS	Opt		Host based
Win NT/2000/XP/2003	Std		Std
Unix / Linux	Std		
Other Systems	SAP		
Processor MHz	1GHz	800MHz	200MHz
Printer Std. Mem. Mb	1GB	512MB	256MB (shared)
Printer Max. Mem. Mb	2GB	1.5GB	256MB (shared)
1000Base-T	Std		No
10/100BaseT	Std		Std
USB	Std		Std
Fax	**Opt**		**Std**
Type	Super G3		Super G3
PC-Fax	Yes		Yes
Fax Broadcast	500 addresses		236 addresses
iFax	Opt		No
Document Filing	**Std**		**No**
Pages Limit	5,500		N/A
Files Limit	3,000		N/A
Network Scanning	**Std**		**Std**
Max. Speed	33oipm (colour & mono)		24opm (colour & mono)
Max. Resolution	600x600		600x600
Destinations	USB, SMB, FTP, Email, PC		TWAIN, Email,SMB/FTP, USB
Functionality	Sharpdesk (Option)		PaperPort SE
Finishing	Opt		No
No of Finisher Sheets (max)	280		N/A
Auto Stapler	Yes		N/A
Sheets Stapled	30		N/A
Hole Punch	No		N/A

*1 MX-C310/380 can only store print jobs. MX-C311/381 have full document filing capabilities

Strengths of MX-C381/C311 & MX-C380/C310	Strengths of Konica Minolta Magicolor 4690MF
✓ Faster output ✓ Document Filing function ✓ Higher paper capacity (std & max.) ✓ More paper cassettes available ✓ Heavier paper support (tray only) ✓ Job programs function ✓ User accounts ✓ Smaller footprint ✓ Higher capacity toner cartridges (black & colour) ✓ Much faster FCOT (black & colour) ✓ Higher max. qty. select (999 vs 99) ✓ More memory (not shared between copy & print) ✓ Larger HDD ✓ Faster processor ✓ Gigabit Ethernet ✓ IFax available ✓ Fax can be broadcast to more destinations ✓ Faster scanning ✓ Finishing option available	✓ Analogue Fax is std ✓ Faster warm-up time ✓ Wider zoom range

■ Sharp MX-C381/C311 & MX-C380/C310 Vs Oki C5550 MFP

Manufacturer	Sharp		Oki
Model	MX-C381/380	MX-C311/310	C5550 MFP
Launch Date	November 2008		November 2007
Also Sold As	N/A		N/A
Multifunctionality	**Std**		**Std**
Network Printer	Std		Std
Network Scanning	Std		Std
Fax	Opt		Std
Document Filing	Std*1		No
Base Engine	Desktop		Desktop
Paper Max. Size	A4		A4
Total Cassettes Std.	1		1
Total Cassettes Max.	4		2
Total Sheets Std.	600		400
Total Sheets Max.	2,100		930
No of sheets (Bypass)	100		100
Max gsm (Trays/Bypass)	105 / 209		176 / 203
Duplex	Std (105gsm)		Opt
Warm up time (secs)	90s		60s
Job Programs	Yes		No
Account Numbers	1,000		No
Footprint (WxD)	560 x 438		500 x 600
Toner Life (Mono)	10k (5%)		6k (5%)
Toner Life (Col)	10k (5%)		5k (5%)
Copier	**Std**		**Std**
Copy/min. (cpm)(B/W)	38	31	32
Copy/min. (cpm)(Col)	38	31	20
FCOT (B/W)	8s		15s
FCOT (Col)	8.9s		23s
Max. Original Size	A4		A4
Max. Qty. Select	999		99
Scanner Resolution	600x600		600x600
Zoom Range	50-200%		25-400%
Std. Mem. Mb	768MB	512MB	256MB (shared)
Max. Mem. Mb	768MB	512MB	768MB (shared)
Hard Drive	Std (80GB)		Opt (40GB)

Manufacturer	Sharp		Oki
Model	MX-C381/380	MX-C311/310	C5550 MFP
Document Feeder	**Std**		**Std**
Type	RSPF		ADF
Capacity (sheets)	50		50
Printer	**Std**		**Std**
Print/min. (ppm)(B/W)	38	31	32
Print/min. (ppm)(Col)	38	31	20
Print Resolution (Equivalent)	1200x1200		1200 x 600
Postscript	C381/311: Std, C380/310: Opt		Std
PCL	Std		Std
XPS	Opt		No
Win NT/2000/XP/2003	Std		Std
Unix / Linux	Std		
Other Systems	SAP		
Processor MHz	1GHz	800MHz	500MHz
Printer Std. Mem. Mb	1GB	512MB	256MB (shared)
Printer Max. Mem. Mb	2GB	1.5GB	768MB (shared)
1000Base-T	Std		No
10/100BaseT	Std		Std
USB	Std		Std
Fax	**Opt**		**Std**
Type	Super G3		Super G3
PC-Fax	Yes		Yes
iFax	Opt		No
Fax Broadcast	500 addresses		100 addresses
Document Filing	**Std**		**No**
Pages Limit	5,500		N/A
Files Limit	3,000		N/A
Network Scanning	**Std**		**Std**
Max. Speed	33opm (colour & mono)		20opm
Max. Resolution	600x600		600x600
Destinations	USB, SMB, FTP, Email, PC		Email, FTP, TWAIN
Functionality	Sharpdesk (Option)		
Finishing	**Opt**		No
No of Finisher Sheets (max)	280		N/A
Auto Stapler	Yes		N/A
Sheets Stapled	30		N/A
Hole Punch	No		N/A

*1 MX-C310/380 can only store print jobs. MX-C311/381 have full document filing capabilities

Strengths of MX-C381/C311 & MX-C380/C310	Strengths of Oki C5550 MFP
✓ Faster mono output (38ppm machine only)	✓ Fax is std
✓ Faster colour output (all machines)	✓ Heavier paper support through trays
✓ Document Filing	✓ Faster warm-up time
✓ Higher std & max paper capacity	✓ Wider zoom range
✓ More paper cassettes available	
✓ Std duplexing	
✓ Job programs	
✓ Smaller footprint	
✓ Faster FCOT	
✓ Higher capacity toner cartridges	
✓ Higher max. qty select	
✓ Separate memory for print and copy	
✓ More memory for printing	
✓ Higher resolution printing	
✓ XPS support (option)	
✓ Faster processor	
✓ Gigabit Ethernet	
✓ Fax can be broadcast to more destinations	
✓ iFax option	
✓ More scan destinations	
✓ Finishing option	

✓ Large colour touch-screen control panel	

■ Sharp MX-C381/C311 & MX-C380/C310 Vs Samsung CLX-8380ND

Manufacturer	Sharp		Samsung
Model	MX-C381/380	MX-C311/310	CLX-8380ND
Launch Date	November 2008		August 2008
Also Sold As	N/A		N/A
Multifunctionality	**Std**		**Std**
Network Printer	Std		Std
Network Scanning	Std		Std
Fax	Opt		Opt
Document Filing	Std*1		No
Base Engine	Desktop		Desktop
Paper Max. Size	A4		A4
Total Cassettes Std.	1		1
Total Cassettes Max.	4		2
Total Sheets Std.	600		620
Total Sheets Max.	2,100		2,720
No of sheets (Bypass)	100		100
Max gsm (Trays/Bypass)	105 / 209		105 / 161
Duplex	Std (105gsm)		Std
Warm up time (secs)	90s		20s (from sleep mode)
Job Programs	Yes		No
Account Numbers	1,000		Yes
Footprint (WxD)	560 x 438		607 x 574
Toner Life (Mono)	10k (5%)		20k (5%)
Toner Life (Col)	10k (5%)		15k (5%)
Copier	**Std**		**Std**
Copy/min. (cpm)(B/W)	38	31	38
Copy/min. (cpm)(Col)	38	31	38
FCOT (B/W)	8s		11s
FCOT (Col)	8.9s		13s
Max. Original Size	A4		A4
Max. Qty. Select	999		999
Scanner Resolution	600x600		1200x1200
Zoom Range	50-200%		25-400% (Platen) 25-200% (DADF)
Std. Mem. Mb	768MB	512MB	320MB (shared)
Max. Mem. Mb	768MB	512MB	832MB (shared)
Hard Drive	Std (80GB)		Std (80GB)

Manufacturer	Sharp		Samsung
Model	MX-C381/380	MX-C311/310	CLX-8380ND
Document Feeder	**Std**		**Std**
Type	RSPF		RADF
Capacity (sheets)	50		100
Printer	**Std**		**Std**
Print/min. (ppm)(B/W)	38	31	38
Print/min. (ppm)(Col)	38	31	38
Print Resolution (Equivalent)	1200x1200		1200x1200 (equivalent)
Postscript	C381/311: Std, C380/310: Opt		Std
PCL	Std		Std
XPS	Opt		No
Win NT/2000/XP/2003	Std		Std
Unix / Linux	Std		Std
Other Systems	SAP		
Processor MHz	1GHz	800MHz	400MHz
Printer Std. Mem. Mb	1GB	512MB	320MB (shared)
Printer Max. Mem. Mb	2GB	1.5GB	832MB (shared)
1000Base-T	Std		No
10/100BaseT	Std		Std
USB	Std		Std
Fax	**Opt**		**Opt**
Type	Super G3		Super G3
PC-Fax	Yes		Yes
iFax	Opt		Opt
Fax Broadcast	500 addresses		
Document Filing	**Std**		**No**
Pages Limit	5,500		N/A
Files Limit	3,000		N/A
Network Scanning	**Std**		**Std**
Max. Speed	33opm (colour & mono)		38opm
Max. Resolution	600x600		600x600
Destinations	USB, SMB, FTP, Email, PC		Email, FTP, SMB, PC, USB
Functionality	Sharpdesk (Option)		
Finishing	Opt		Opt
No of Finisher Sheets (max)	280		500
Auto Stapler	Yes		Yes
Sheets Stapled	30		50
Hole Punch	No		No

*1 MX-C310/380 can only store print jobs. MX-C311/381 have full document filing capabilities

Strengths of MX-C381/C311 & MX-C380/C310	Strengths of Samsung CLX-8380ND
✓ Document Filing function	✓ Higher paper capacity
✓ Smaller footprint	✓ Higher capacity toner cartridges
✓ More paper cassettes available	✓ Higher scanner solution
✓ Heaver paper support (Bypass only)	✓ Wider zoom range
✓ Job program function	✓ More copy memory (albeit shared)
✓ Faster FCOT (black & colour)	✓ Higher capacity document feeder
✓ Print and copy memory is separate	✓ Slightly faster scanning speed
✓ More copy memory as std	✓ Optional finisher has higher output capacity
✓ True 1200x1200dpi printing	✓ 50 sheet stapling
✓ XPS support (option)	
✓ Faster processor	
✓ More printer memory (std and max.)	
✓ Gigabit Ethernet	

■ Sharp MX-C381/C311 & MX-C380/C310 Vs Xerox Phaser 8860MFP

*Phaser 8860MFP is a Solid Ink MFP. (not a toner MFP)

Manufacturer	Sharp		Xerox
Model	MX-C381/380	MX-C311/310	Phaser 8860MFP
Launch Date	November 2008		November 2007
Also Sold As	N/A		N/A
Multifunctionality	**Std**		**Std**
Network Printer	Std		Std
Network Scanning	Std		Std
Fax	Opt		Std
Document Filing	Std*1		No
Base Engine	Desktop		Desktop
Paper Max. Size	A4		A4
Total Cassettes Std.	1		1
Total Cassettes Max.	4		3
Total Sheets Std.	600		625
Total Sheets Max.	2,100		1,675
No of sheets (Bypass)	100		100
Max gsm (Trays/Bypass)	105 / 209		120 / 220
Duplex	Std (105gsm)		Std
Warm up time (secs)	90s		6s
Job Programs	Yes		No
Account Numbers	1,000		Yes
Footprint (WxD)	560 x 438		532 x 665
Toner Life (Mono)	10k (5%)		14k (5%)
Toner Life (Col)	10k (5%)		14k (5%)
Copier	**Std**		**Std**
Copy/min. (cpm)(B/W)	38	31	30
Copy/min. (cpm)(Col)	38	31	30
FCOT (B/W)	8s		15s
FCOT (Col)	8.9s		15s
Max. Original Size	A4		A4
Max. Qty. Select	999		99
Scanner Resolution	600x600		600x600
Zoom	50-200%		25-400%
Std. Mem. Mb	768MB	512MB	512MB (shared)
Max. Mem. Mb	768MB	512MB	1GB (shared)
Hard Drive	Std (80GB)		Std (40GB)

Manufacturer	Sharp		Xerox
Model	MX-C381/380	MX-C311/310	Phaser 8860MFP
Document Feeder	**Std**		**Std**
Type	RSPF		RADF
Capacity (sheets)	50		50
Printer	**Std**		**Std**
Print/min. (ppm)(B/W)	38	31	30
Print/min. (ppm)(Col)	38	31	30
Print Resolution (Equivalent)	1200x1200 (true)		2400dpi
Postscript	C381/311: Std, C380/310: Opt		Std
PCL	Std		Std
XPS	Opt		No
Win NT/2000/XP/2003	Std		Std
Unix / Linux	Std		Std
Other Systems	SAP		Novell NDPS
Processor MHz	1GHz	800MHz	750MHz
Printer Std. Mem. Mb	1GB	512MB	512MB (shared)
Printer Max. Mem. Mb	2GB	1.5GB	1GB (shared)
1000Base-T	Std		No
10/100BaseT	Std		Std
USB	Std		Std
Fax	**Opt**		**Std**
Type	Super G3		Super G3
PC-Fax	Yes		Yes
Fax Broadcast	500 addresses		
iFax	Opt		No
Document Filing	**Std**		**No**
Pages Limit	5,500		N/A
Files Limit	3,000		N/A
Network Scanning	**Std**		**Std**
Max. Speed	33opm (colour & mono)		22opm
Max. Resolution	600x600		600x600
Destinations	USB, SMB, FTP, Email, PC		PC, TWAIN, email, Folder
Functionality	Sharpdesk (Option)		Scan to PC Desktop SBE
Finishing	**Opt**		**No**
No of Finisher Sheets (max)	280		N/A
Auto Stapler	Yes		N/A
Sheets Stapled	30		N/A
Hole Punch	No		N/A

*1 MX-C310/380 can only store print jobs. MX-C311/381 have full document filing capabilities

Strengths of MX-C381/C311 & MX-C380/C310

- ✓ Faster output
- ✓ Document Filing
- ✓ Higher max. paper capacity
- ✓ Job programs
- ✓ Smaller footprint
- ✓ Faster FCOT (black & colour)
- ✓ Higher max. qty. select (999 vs 99)
- ✓ Memory not shared between print and copy
- ✓ More copy memory (std & max)
- ✓ Larger HDD
- ✓ XPS support (option)
- ✓ Faster processor
- ✓ More printer memory (std & max)
- ✓ Gigabit Ethernet
- ✓ iFax option
- ✓ Faster scanning
- ✓ Scan to USB / print from USB
- ✓ Optional finisher
- ✓ Larger, touch-screen control panel

Strengths of Xerox Phaser 8860MFP

- ✓ Fax is std
- ✓ Higher std paper capacity (625 vs 600)
- ✓ Heavier paper support
- ✓ Faster warm-up time
- ✓ Wider zoom range
- ✓ Higher capacity toner cartridges

Features List

■ General Setting Functions

Name	Description
Auto Clear	MX-C381/C311 & MX-C380/C310 returns to initial state after a certain period of inactivity.
Auto Power Shut-Off	Turns the machine off after it has remained idle for a preset amount of time. You can preset this shut-off time as desired.
Auto Tray Switching	Automatically switches to another paper tray filled with the same size paper if one of the trays runs out. Two or more trays must be filled with the same size paper to use this function.
Clock	Time is adjusted automatically via the network by using either NTP or SNTP protocols.
Customise Key	Certain keys on the LCD control panel can be assigned to frequently used functions.
Device Cloning	Copies the data settings from one MX-C381/C311 & MX-C380/C310 and sends them to another MX-C381/C311 & MX-C380/C310.
User Control (Auditing)	Allows the network administrator to monitor and control individual usage.
Device Control (Restriction)	Restricts the use of specified peripheral devices.
Display Contrast	Adjusts the contrast of the LCD control panel.
Display Language	Selects the display language.
E-mail Alert	Sends an e-mail to notify you of machine troubles (such as being out of toner or paper).
E-mail Status	Notifies you of machine status by sending e-mails on a regular basis.
Firmware Update	Provides diverse methods of updating firmware.
Function Review	Confirms the status of special functions in use just by touching an icon on the LCD control panel.
Job Priority	Places jobs in order of priority.
Job Status	Displays the status of jobs in progress as well as a list of finished jobs.
Key Touch Sound	Adjusts the volume of key touch sound.
Message Time Control	Selects the period of message display.
Metadata Set	Generates corresponding XML data when scanning an image.
Multi Access	Multiple jobs can be performed at the same time. (For example, while a large copy job is in progress, originals for the next copy job can be scanned. And as soon as the first job is finished, the second job starts automatically.)
Offset	Enables MX-C381/C311 & MX-C380/C310 to slightly shift multiple sets of documents to differentiate jobs from different users. (Requires optional Inner Finisher MX-FN12)
Sharp OSA (Sharp Open Systems Architecture)	Allows third-party software developers to easily customise the MX-C381/C311 & MX-C380/C310 by integrating the MFP with their application, thus enhancing ease of use and boosting work efficiency. MX-C381/C311 & MX-C380/C310 supports both Sharp OSA ver2.0 and Sharp OSA ver3.0.
Paper Type Registration	Registers types of paper other than the default settings, and makes it possible to restrict specific functions according to paper type.
Paper Tray Settings (Paper Type)	Specifies the designation of paper type (such as plain paper, recycled paper or coloured paper) for each paper tray.
Preheat Mode	The first level of power reduction on the MX-C381/C311 & MX-C380/C310. After the machine has completed a job and no further machine operations have been performed, the power to the fuse unit is reduced.
Protocol	Supports four commonly used network protocols (TCP/IP, IPX/SPX, NetBEUI, and Ether Talk).

Name	Description
Remote Front Operation Panel	The MFP operation panel and keyboard can be displayed on users' PC. Users can perform the MFP operation panel and keyboard from their PC.
Service Setup	Via Web pages provided by the MX-C381/C311 & MX-C380/C310, you can configure the MFP from your computer using a Web browser (such as Netscape Navigator or Internet Explorer).
Staples	The optional Finisher staples output documents together.
Total Count	Displays the number of times the machine has been used.
User Control (Auditing)	Allows the network administrator to monitor and control the amount of use accumulated by individual users. (New models can control more parameters.)

■ General Connectivity

Name	Description
Connection Test	Enables you to test the connection between the MX-C381/C311 & MX-C380/C310 and mail/LDAP server using a Web browser screen on a PC.
LDAP	Lightweight Directory Access Protocol (LDAP) support simplifies the input of e-mail addresses by allowing the MX-C381/C311 & MX-C380/C310 access to the address data stored on the LDAP servers.
IP version 6	IPv6 follows IPv4 as the next version of the Internet protocol formally adopted for general use.
Print Port	Supports four commonly used printer ports (10Base-T/100Base-TX/1000BaseT, and USB2.0).

■ Copy Functions

Name	Description
2-Colour Mode	Enables two-colour copying.
Auto Colour Mode	Controls colour image data and selects the best processing mode for various types of originals. (For example, text on meshed background)
Auto Colour Selection	Enables the MFP to distinguish whether the original is colour or B/W with a press of the "colour scan" button.
Auto Magnification Selection	Automatically selects the appropriate copy ratio according to the original document size and selected paper size.
Auto Paper Selection	Automatically selects the same paper size as the original document set on the platen or in the document feeder.
B/W Reverse	Reverses black and white in a copy to create a negative image. This function can only be used for black and white copying.
Card Shot	Prints the front and back of an original onto a single side of paper.
Centring	Moves the image to the centre of the paper.
Colour Balance	Adjusts the colour, tone and density of colour copies.
Colour Calibration	The Auto Colour Calibration programme automatically corrects misadjusted colour gradation.
Copy Ratio (Preset)	In addition to the preset enlargement/reduction ratios, frequently used copy ratios can also be set.
Copy Set Setting	Specifies the number of copies by using the numeric keypad. (MAX 999)
Date Print	Prints the date in one of the four available formats: YYYY/MM/DD, MM/DD/YYYY, DD/MM/YYYY and MM/DD/YYYY.
Duplex Copying	Prints data on both sides of the paper.
Duplex via Bypass	Automatically prints data on both sides of paper fed from the manual bypass tray.
E-sort (Electronic Sorting)	Automatically collates multiple sets of copies in page order without the aid of a sorter.

Name	Description
Erase	Erases shadows that appear around the edges of copies of books and other thick originals. (Edge erase)
Exposure	Selects one of Auto, Text, Text/Printed Photo, Printed photo, Text/Photo, Photo, Map, or Light Original according to the type of originals being copied.
Group	Groups output of large-volume copies by page.
Initial Status Settings	Customises the machine's default state.
Interrupt	Temporarily stops the job in progress and perform the interrupt copy job.
Job Build	Convenient for producing jobs with more pages of originals than the document feeder can hold. Combines multiple scanning jobs and copies them as one original set.
Job Program	Stores frequently used copy settings such as density, copy ratio and other special functions for easy recall.
Job Reservation	Even while the MFP is copying, you can reserve the machine for the next copy job if the platen is free.
Margin Shift	Shift the copy image right, left, or down to adjust the margin.
Mirror Image	Copies a mirror image of the document.
Mixed Size Original	Copies documents of different sizes that are fed through the document feeder. ("Letter and Legal" only.)
Multi Shot (2-in-1)	Copies two originals onto a single sheet of paper in a uniform layout.
Page Numbering	Prints the page number at the top or bottom of the paper.
Pamphlet Copy	Arranges copies in the proper order for eventual centre stapling and folding into a booklet.
Photo Repeat	Creates repeat images of a photo-size original onto a single sheet.
Process Control	Monitors copy quality and makes adjustments to ensure optimum results.
Proof Copy (MX-C381/C311)	Before copying multiple sets, you can output one set to be checked. The user can either modify settings as needed or output the remaining number of sets with a touch of the LCD control panel.
Rotation Copy	When "auto paper select mode" or "automatic ratio selection" is in operation and the original is placed in a different orientation (vertical or horizontal) from the paper, the original image will be automatically rotated 90 degrees to enable correct copying onto the paper.
Single Colour	Enables one-colour copying.
Slow Scan Mode	Scans documents at a reduced speed for thin documents to reduce misfeed.
SOPM (Scan Once / Print Many)	A single scan can provide multiple sets of copies with memory and HDD storage of scanned images. -Less damage to the original document and less wear on the scanning -High productivity due to minimised scanning time.
Stamp	Prints one of 12 messages such as "CONFIDENTIAL" in bold reverse letters. You can select the position, density, colour, size, and the pages (first page only or all pages).
Text Print	Prints up to 50 characters of text such as "5-YEAR INTERIM PLAN". Frequently used text sets can be stored in the MFP.
Transparency Inserts	Automatically inserts a sheet of paper between each sheet of transparency film.
XY Zoom	Makes a copy that has different enlargement/reduction ratios horizontally and vertically.

Printer Functions

Name	Description
A4/Letter Auto Change	If you want to print A4 size data but A4 paper has run out, this feature prints it on letter size paper.
Auto Job Control Review	Automatically displays the job settings before printing so you can check it.
Barcode Font	The optional Barcode Font Kit enables printing of barcodes.
Binding Edge	Determines how the left, right and top edges of a document's front and back pages are positioned when automatically printing on both sides using the duplex function.
Carbon Copy	Prints the same data on paper from two or more different paper trays.
Colour Detection	Colour selection during printing – the MX-C381/C311 & MX-C380/C310 differentiate between colour and black & white pages in multi-page files and selects the correct mode with the following exception: Files that contain images are detected and counted as colour documents if Automatic mode is pre-set in the printer driver. To be always counted and printed as Black & White, select 'Black & White' in the driver.
Continuous Print (Extra Print Mode)	When a large number of small-volume print jobs are sent to the MX-C380/C381/ MX-C310/C311, it processes these jobs as a single print job. This eliminates procedures normally required between separate print jobs (such as polygon mirror control processing), thus enhancing printing efficiency.
Direct Print (e-mail)	When an e-mail account for an MFP is set up on the mail server, the user can send e-mail to the MFP with attached print data (with extensions such as .pcl, .ps, .pdf, tiff, and tif). The data can then be printed without using a printer driver. (The MFP prints it automatically.)
Direct Print (FTP)	An FTP server can be stored in the MFP to enable direct printing of files on the server from the control panel without the need for a printer driver. Files with the extensions .pcl, .ps, .pdf, tiff, tif, and prn can be printed.
Direct Print (USB memory)	Prints data directly from a USB memory device connected to the MFP without the need for a printer driver. Users select the data in memory from the MFPs control panel and follow instructions to print the file.
Direct Print (Web)	Prints data with the extensions such as .pcl, .ps, .pdf, tiff, and tif via a Web page without the need for a printer driver.
Duplex Printing	Prints data on both sides of the paper.
Encrypted PDF	Prints an encrypted PDF using the Direct Print function.
ESC/P (Super) Setting	Enables setting changes (printing start position, fonts, reduced size printing, etc.) when printing data in ESP/C.
Fit to Page	Automatically selects the appropriate reduction/enlargement ratio to match the paper size you select.
Graphics Mode	Selects a graphics mode from raster or vector.
ICC Profile	Using ICC profile data enables colour balance adjustments with other colour output machines.
Image Orientation	Chooses portrait or landscape as the image orientation for print jobs.
Interface Setting	Controls and monitors data transmitted to the USB port or network port of MFP. (for example, IO time out, or port switching method).
Line Thickness	Adjusts the line width of vector graphics. (black and white printing only)
Mirror Image	Reproduces a mirror image printout of the original print data.
Notice Page	Prints a notice page automatically (for example, "print error caused by no PIN code in Audit mode").
Notify Job End	A pop-up screen appears on your PC to notify you that the print job has finished.
N-up	Prints multiple pages of data onto a single sheet.
Object Control	Sets items such as fonts to use and graphics modes.
Overlay	Prints a pre-registered overlay on print data.

Name	Description
Paper Selection (Paper Type)	Configures the type of paper in the paper tray via the printer driver user interface. (For example, plain, recycled, colour, heavy paper, or transparency) The setting restricts printer function automatically.
PCL Setting	Changes setting when printing data in PCL.
Poster	Enlarges an original image to a size larger than A4 and prints the divided images onto multiple sheets of print paper.
Print Density Level	Lightens or darkens the print density of colour and black and white images. For example, to adjust the density of the background colour in tables and graphs if the text is too hard to read.
Resolution Setting	Selects the printing resolution, 600 or 1200dpi
Retention	Stores output in the MFP and retrieves it by using three modes, 'hold after print', 'hold before print' and 'proof print'.
Hold after Print	Prints and then stores the data.
Hold before Print (Hold Only)	Stores data without printing it.
Proof Print (Sample Print)	When you print two or more copies, only one set is printed and the data is stored.
ROPM (RIP Once / Print Many)	Downloads and stores large multi-page print data to memory once, and reuses the data to process multiple print sets.
Rotate 180 degrees	Prints jobs rotated by 180 degrees.
Text to Black	Prints all characters (colour and B/W) as black characters.
Toner Save	Prints data using less toner than the usual amount.
Transparency Insert	Places blank insert sheets between transparent sheets when printing data onto transparent film.
Vector to Black	Prints all lines or areas other than white lines and areas in black.
Watermarks	Prints a watermark such as "IMPORTANT" or "CONFIDENTIAL" onto printouts.

■ Image Send Functions (General)

Name	Description
2-Sided Original Sending	Scans 2-sided originals efficiently by using the RSPF.
Ad-hoc Address	Inputs ad-hoc addresses as needed.
Broadcasting	Sends a document to multiple destinations in a single operation.
Card Shot	Arranges the back and front of an ID card etc. onto one side of a sheet with simple operation.
Dual Page Scan	Divides and scans the left and right sides of an original into two separate pages.
Erase	Erases shadows that appear around edges when scanning a book original or thick original. (Edge erase)
Exposure	Adjusts the image density for the original.
Import/Export Address	Copies address data from one MX-C381/C311 & MX-C380/C310 and sends it to other MFPs. ('Via Web page' only. 'Via USB memory' isn't supported.)
Job Build	Convenient for producing jobs with more pages of originals than pages that the document feeder can hold. Combines multiple scanning jobs and transfers them as one original set.
Job Programme	Registers settings of scan jobs, which can be called up with easy operation.
Long Original Transmission	Scans long originals (MAX 500 mm in length) by feeding them into RSPF.
Memory Transmission	Once a document is scanned, it is stored in the memory.
One-Touch Address	Registers commonly used addresses that can be selected with easy operation from the LCD control panel.
Quick Key	Calls up any registered address by touching the [QUICK] key and entering the three-digit number you registered at the time of Address Book registration. The number is entered using numeric keys.
Resend	Sends new data to preceding eight destinations.
Resolution	Selects a scanning resolution. (For example, 200dpi, 300dpi, 400dpi, 600dpi)
Scaled Transmission	Enlarges or reduces an original for transmission.
Sending Restriction	Sets the maximum limitation of scanned data size.
Timer Transmission	Specifies the day of the week and time of transmission or polling operation in advance. Transmission begins automatically at the specified time.
Thin Paper Scanning and Bound Originals Scanning	It is possible to scan originals that normal fax machines can't scan.
Transaction Report	Prints a transaction report automatically and you can confirm the transaction results.

■ Image Send Functions (Scan/i-Fax)

Name	Description
Ad-hoc File Name	Inputs a file name when sending e-mail.
Ad-hoc Message	Inputs an e-mail message.
Ad-hoc Subject Name	Inputs the subject name when sending e-mail.
CC/BCC Sending	Sends e-mail using CC and/or BCC.
Direct SMTP	Sends/ receives Internet FAX without going through mail server. Users can send/receive FAX in real time.
File Format	MX-C381/C311 & MX-C380/C310 supports commonly used file formats for scanned data (Monochrome: TIFF, PDF, encrypted PDF, and XPS) (Colour: TIFF, PDF, encrypted PDF, JPEG and XPS)
Network TWAIN	MX-C381/C311 & MX-C380/C310 supports TWAIN, enabling you to scan image data efficiently with TWAIN-compliant software.
One Page Per File	Scans multiple documents at once and groups them into separate files for each page. (TIFF and PDF)
Pre-Setting Mail Signature	Automatically appends a signature to the end of the body text of e-mail. It is able to register contents in the Web pages.
Resolution	Selects the optimum scan resolution for the original.
Scan Destination	Sends and forwards scanned images to destinations connected on the network (or local storage) by using handy and easy-to-use options: Send to Desktop / Send to E-mail / Send to FTP / Send to SMB / Send to USB memory / Send to HDD
Send to Desktop	Sends scanned files directly to your PC without routing through a server. These files automatically appear on your desktop as thumbnails for greater ease of use.
Send to E-mail	Sends scanned files as an attachment to any e-mail address over the Internet.
Send to FTP	Sends scanned files for storage on an FTP server. If you configure the "Scan to FTP Server" settings, the MFP automatically sends e-mail that contains links to the scanned files to destinations, so receivers can view the file with a single click.
Send to HDD	Sends scanned files to the MFP's HDD.
Send to SMB	Sends scanned files for storage on a file server that uses SMB. (SMB is a type of protocol commonly used on Windows PCs.)
Send to USB	Sends scanned files to a USB memory.
Suppress Background	Suppresses the light background of the original when scanning data.

■ Image Send Functions (Fax)

Name	Description
2-sided Reception	Prints an incoming fax on both sides of paper.
Chain Dial	By pressing the [Pause] key, a number entered before can be combined with a number entered after.
Direct Transmission	After the connection is established and the fax signal from the other machine is confirmed, scanning begins without using memory and the fax is transmitted.
Fax Staple	Designates the number of copies to be printed out as well as whether incoming faxes are to be stapled.
F-Code	F-Code is a standard established by the ITU-T to ensure greater security and confidentiality in fax transmissions. Until now, special communications (for example, 'confidential transmission' and 'relay broadcast transmission') could be performed only with another Sharp fax machine. However, these functions are now available with other fax machines, as other manufacturers have come to support F-Code.
Inbound Routing	Received faxes can be automatically forwarded to a specified e-mail address, FTP server, SMB server, or desktop.)
PC-Fax	Sends data directly from a PC to a fax machine without printing the data on paper.
Polling	Asks another fax machine whether it wants to send information and receive that information. Naturally, information must already be stored on that machine in memory called "polling memory." You can also perform the reverse, or scan a document to polling memory on your fax machine as the information to be retrieved by another fax machine.
Preview/thumbnail	Received fax data can be displayed as thumbnails and preview screen on touch panel. (Thumbnail: MX-C381/C311 only)
Quick Online Transmission	MX-C381/C311 & MX-C380/C310 with the fax option start to dial and send a multiple-page document as soon as the first page is scanned into memory.
Recall Mode	Resends the document after a certain period of time if the recipient is busy.
Received Data Print Hold	Can choose not to print out an incoming fax automatically. When this function is enabled, a password entry screen will appear without printing the received fax automatically.
Rotate Transmission	MX-C381/C311 & MX-C380/C310 is set by default to rotate a vertically placed original so that it is oriented horizontally before transmission.

Document Filing

Name	Description
Back Up via Web Page	Backs up data via a Web page.
Browsing via Web Page	Browses and operates data via the Web page.
Confidential File	Protects a confidential file with password.
Confidential Folder	Protects confidential folders with passwords.
Data Saving Capability	Saves data file in : Quick file folder (MAX12GB, 1,700 pages or 1,000 files) – (MX-C381/C311 only) Main/Custom folder - MAX 38GB , 5,500 pages or 3,000 files). (Custom folder :MX-C381/C311 only)
File Name	You enter the ad-hoc file name up to 30 characters long directly or MX-C381/C311 & MX-C380/C310 generates file names automatically.
Preview	Before operating data, data can be checked as preview screen in front panel or web page (Front panel: MX-C381/C311 only)
Property Change	The property of saved files can be switched between "sharing", "protect" or "confidential."
Reprint	Reprints data saved to the MX-C381/C311 & MX-C380/C310 with easy operation.
Resend	Resends data saved to the MX-C381/C311 & MX-C380/C310 with easy operation.
Search	Searches a file via the LCD control panel. (Files are displayed as thumbnails. – MX-C381/C311 only)

Applications

Name	Description
Network Scanner Tool	This application detects all available MFPs on the network and creates destination addresses on the MFP automatically. It also receives scanned data from other MFPs.
Printer Administration Utility (Client)	This Sharp original application makes printer networks easier to manage as it allows network administrators to customise monitored items and view settings such as IP addresses directly from their PC.
Printer Administration Utility (Web)	Simplifies the installation, monitoring and use of Sharp MFPs.
Printer Status Monitor	Allows you to monitor important printer information on your PC via network. For example, when something is wrong with the MX-C381/C311 & MX-C380/C310, the MFP alerts you via an easy-to-follow graphic display. [Advance] Important information includes on-line/off-line status, name of the current active print job, and machine conditions (such as amount of paper or toner).
Sharpdesk	Sharpdesk is Sharp's original document management software and is fully integrated with Sharp MFPs scanner functions. This software provides you with a personal, PC desktop based system for managing scanned images and electronic file documents.

Security Functions

Name	Description
Confidential Print	This function is a part of the 'Retention Print' function. 'Hold after Print with PIN or Pass Code' is called 'Confidential Print.' Requires a personal ID number to be entered at the MFP before printing.
Data Security Kit	With the optional Data Security Kit, data that has been scanned for copying or printing is automatically cleared from storage after the job is finished. It can also encrypt certain types of data, and provide a Document control Function.
Disabling of List Print	Network settings such as IP addresses and private information such as address books are stored in the main unit. The printout of this data can be disabled to prevent leak of individual data in the address book or administrative information on MFPs.
Disabling Selection from Address Book	Use of the address book can be disabled in the following transmission methods to avoid data transmission to invalid and unauthorised destinations. Scan to E-mail / Scan to FTP / Scan to Desktop / Scan to Network Folder / Internet Fax Send / Fax Send
Document Administration	Forwards all sent/received documents (except "USB memory scan" and "PC scan" data) to 'e-mail', 'FTP', 'desktop' and 'Network folder' for the administrator.
Document Control	When data printed under this mode is scanned by MX-C381/C311/ MX-C380/C310 series or later models equipped with the Data Security Kit, the Document Control function cancels the job by detecting certain characteristic patterns inserted upon copying/printing, and prevents printing/transmission of the data.
IEEE802.1X	Authenticates hardware that connects to the network at the LAN switch or the wireless LAN access point. This is used for some "unauthorised connection prevention solution" and "quarantine network solution".
IP/MAC Address Filtering/Port Filtering	IP/MAC address filtering controls MFP access to enable secure network printing. Port filtering blocks unneeded TCP/IP services and enhances network security.
IPsec	Encrypts and certifies data that flows on the network. It is able to encrypt all data sent by using IP.
Job Log	Keeps a log of machine operations.
Network Authentication	Provides access to various servers (such as mail servers and FTP servers) only to users who have been authorised.
Operating System (OS)	Sharp's proprietary operating system makes it less vulnerable to attack from the outside by viruses and malicious executable files. This is an advantage compared to mainstream OS installed on our competitors.
Sender Control	Impersonated transmission when scanning to E-mail must be prevented. For this purpose, the [Sender Name] selection in the [Send] settings for Scan to E-mail operations can be enabled/disabled as needed. When the selection is disabled, the Web page administrator's address is applied to the sender and changes are restricted.
SSL Network Communication	Enables data communication using SSL (Secure Sockets Layer), a protocol that encrypts data for transmitting over networks.
SMB	Server Message Block for scanning to secured folders.
SNMP v3	Simple Network management protocol version 3 for advanced security.
User Authentication	Confirms whether a user is authorised to use the MFP.

SPECIFICATIONS

■ Basic Specifications

Base Engine	MX-C380/C381		MX-C310/C311	
	Monochrome	Colour	Monochrome	Colour
Simplex to Simplex (A4 size)	38 cpm	38 cpm	31 cpm	31 cpm
Photoconductor type	OPC(Diameter: Black: φ30mm, Colour: φ30mm x 3)			
Record method	Electronic Photo (Laser)			
Development method	Dry-Type Dual-Component Magnetic Brush Development			
Charge method	Colona discharging			
Transfer method	Middle Transfer Belt			
Cleaning method	Counter Blade			
Fusing method	Heat Roller			
Warm up time	90 seconds or less. (At rated voltage, 23°C, 73.4°F)(except registration adjustment, process control, toner supply)			
Pre-heat	Available			
Jam recovery time	45 seconds or less Condition: After the door is kept open for 60 seconds, standard setting, the polygon motor halt.			
Resolution	Writing: Copy: 600 x 600dpi, Print: 1200 x 1200dpi			
Printable area	A4R: 206x290mm B5R: 178x250mm A5R: 144x203mm ExecutiveR: 180x260mm Postcard: 96x141mm			
Power source	220-240V, 50/60Hz			
Max. power consumption	1.84kW (220 to 240V)			
Power switch	2 (Primary switch: left side of main unit,; Secondary switch: the operation panel)			
PM cycle	Monochrome: 60K Colour: 30K			
Average print volume	Monochrome: MX-C380/C381: 5.6K, MX-C310/C311: 3.5K Colour: MX-C380/C381: 2.4K, MX-C310/C311: 1.5K			
MCBJ	10K			
MCBF	60K			
Outer dimensions (W x D x H)	MX-C381/C311: 560 x 493 x 714 mm (with RSPF) MX-C380/C310: 560 x 438 x 714mm (with RSPF)			
Occupied space (W x D)	535 x 438mm			
Weight (without consumables)	46kg (with RSPF)			

Controller Board		
CPU	Power QUICCIII-MPC8533E(31cpm :800MHz, 38cpm: 1GHz)	
Interface		
IEEE1284 Parallel	No	
Ethernet	1 port	
	Interface	10Base-T, 100Base-TX, 1000Base-T
	Support Protocol	TCP/IP (IPv4, IPv6), IPX/SPX, Ether Talk, NET BEUI
Memory slot	System: 2 slots (1 empty slot) Local: 2 slots (1 empty slot) Codec memory: 1 slot	

Emission Concentration		
	Published specification	
Ozone	0.02mg/m^3	
Dust	0.075mg/m^3	
Styrene	0.07mg/m^3	
Acoustic Noise Emission		
	MX-C380/C381	MX-C310/C311
In action	57 db(A)	53 dB (A)
Power Consumption		
Maximum rated power consumption	1.84kW (200 to 240V)	
TEC value specified by New International Energy Star	9.0 KWh or less	7.2 kWh or less

Operation Panel (Colour LCD: 4.3inch QVGA)	
Form	Dot matrix LCD
Display dot number	480 x 272 dots (Q-VGA)
LCD Drive Display Area	95.04 x 53.856mm
LCD backlight	LED
LCD contrast adjust	Yes

Operation Panel (Colour LCD: 8.5inch WVGA)	
Form	Dot matrix LCD, touch panel
Display dot number	800 x 480 dots (W-VGA)
LCD Drive Display Area	184.8 x 110.8mm
LCD backlight	Fluorescent tube, backlight
LCD contrast adjust	Yes

Document Glass (Platen)			
Scan resolution (Copy Mode)		Monochrome	Colour
	Original cover	600x600dpi (Default) 600x300 dpi	600x600dpi (Default) 600x300dpi
	RSPF	600x600dpi 600x300dpi (Default)	600x600dpi 600x300dpi (Default)
Exposure lamp	Cold cathode White lamp (2 pieces)		

■ Peripheral Devices specifications

RSPF (Reversing Single Pass Feeder)					
Scan speed		Monochrome (A4)		Colour (A4)	
		MX-C380/C381	MX-C310/C311	MX-C380/C381	MX-C310/C311
Copy	1-sided:	33 sheets/minute (600x300dpi)	31 sheets/minute (600x300dpi)	33 sheets/minute (600x300dpi)	31 sheets/minute (600x300dpi)
		16.5 sheets/minute (600x600dpi)		16.5 sheets/minute (600x600dpi)	
	2-sided:	11 sides/minute (600x300dpi) 6.5 sides/minute (600x600dpi)		11 sides/minute (600x300dpi) 6.5 sides/minute (600x600dpi)	
Fax/ I-Fax	1-sided:	33 sheets/minute (200x200dpi)		N/A	
	2-sided:	11 sides/minute (200x200dpi)			
Scanner	1-sided:	33 sheets/minute (200x200dpi)		33 sheets /minute (200x200dpi)	
	2-sided:	11 sides/minute (200x200dpi) 6.5 sides/minute (200x200dpi)		11 sides/minute (200x200dpi) 6.5 sides/minute (200x200dpi)	
Document setup direction		Face up (1 to N feeding)			
Document standard location		Centre standard			
Document transport method		Sheet-through method			
Document sizes		Width: 100mm – 216mm Length: Max 500mm Mixed Size Original ("Letter and Legal" only)			
Document weights		1-sided: Thin paper: 35-49g/m^2 Plain paper: 50-128g/m^2 2-sided: 50-105g/m^2			
Document carrying capacity		Maximum: 50 sheets (80g/m^2), or maximum: 6.5mm			
Types of document that may not be transported		Transparency paper, second original drawing, tracing paper, carbon paper, thermal paper, wrinkled / broken / torn document, document with cuts and pastes, documents printed by an ink ribbon, and perforated document except 2-punched / 4-punched (Perforated document by punch unit is allowed.)			
Paper detection		No			

500x1 sheet Paper Feed Unit (MX-CSX1/2)		
Paper sizes	MX-CS1: A4R, B5R, A5R MX-CS2: A4R, B5R	
Paper type/weight	Plain paper: 60-105g/m^2	
Paper capacity	Standard paper: 500 sheets (80g/m^2)	
Paper types	Plain paper, pre-printed paper (not including backing papers), recycled paper, letterhead, pre-punched paper, and coloured paper Users can set up these types of paper.	
Detection of paper size	Auto detection Auto-AB	MX-CS1: A4R, B5R, A5R MX-CS2: A4R, B5R
Dimensions	MX-CSX1: W 535 x D 438 x H 112mm MX-CSX2: W 535 x D 438 x H 110mm	
Weight	MX-CSX1: 6.8kg MX-CSX2: 5.6kg	

Business Card Feeder (MX-BTX1) (Production start date: TBD)	
Original direction	Upward standard (1 to N feeding standard)
Paper Feeding	Left-Front alignment
Paper Size	89-91mm x 51-55mm
Paper Weight	131-224gms (Reference Value)*
Document Capacity	Max: 4.8mm (Target value)*
Detection of Original size	No

Detection of Original	Yes (Using original mechanism)
Dimensions	W 114.1 x D 87.2 x H 24.1mm
Weight	34g

* These value will change by test/ evaluations situation.

Inner Finisher (MX-FN12)		
Ejectable paper size	A4R, B5R, A5R, Envelope(Monarch / Com-10 / DL / C5-R)	
Paper type/weight	Thin paper: 55-59g/m^2 Plain paper: 60-105g/m^2 Heavy paper: 106-209g/m^2*	
Mode type	Non-sort, Offset sort, Staple sort	
Paper sizes allowed for offset	A4R, B5R	
Offset quantity	25mm	
Stored sheets	Non-stapled: 280 sheets (80g/m^2 A4 size) 150 sheets (80g/m^2 A5 size) 100 sheets in a row (Postcard) 20 sheets in a row (Envelope) 280 sheets A4 size or 150 sheets A5 size (OHP/ label paper) 100 sheets in a row (Uncertainly size) Stapled: When number of bundled sheets is 2-10 sheets: 300 sheets or 30 bundles or less than 33mm When 11-30 sheets: 300 sheets or 10 bundles or less than 33mm	
Sizes allowed for stapling	Corner	A4R, B5R
Number of sheets to be stitched	A4R, B5R: 30 sheets (80g/m^2)	
Dimensions (WxDxHmm)	W 475 x D 333 x H 158mm When exit tray is expanded: W 523 x D 333 x H 158mm	
Foot space (WxDmm)	When exit tray is expanded: 715mm (W) When 4.3 inch model: 453mm (D) When 8.5 inch model: Compliant with main unit	
Weight	About 9.0kg	

* Heavy paper which is 129g/m^2 or more is not guaranteed.

PS3 Expansion Kit (MX-PKX5) for MX-C380/310 only	
Packaged items	Product key sheet PS CD-ROM Application number (written on the product key sheet)
Included software in the CD-ROM	PS font

Barcode font Kit (AR-PF1)	
Included software	28 types of barcode font: Codebar-Regular / Code128-Narrow-Regular / Code128-Regular Code128-Wide-Regular / Code39HalfInch-Regular / Code39OneInch-Regular Code39QuarterInch-Regular / Code39Slim-Regular / Code39SmallHigh-Regular / Code39SmallLow-Regular / Code39SmallMedium-Regular / Code39Wide-Regular / OCR-B-C39-Regular / Interleaved2of5-Regular / Interleaved2of5Thin-Regular / OCR-A / OCR-B / Upc-HalfBarsThin / Upc-HalfMusicThin / Upc-HalfNarrow-Regular / Upc-Half-Regular / Upc-HalfThin-Regular / Upc-TallBarsThin / Upc-TallMusicThin / Upc-TallNarrow-Regular / Upc-Tall-Regular / Upc-TallThin-Regular / USPS-ZIP

XPS Expansion Kit (MX-PUX1)	
Packaged items	CD-ROM Installation manual Product key sheet

	Application number (for each license)
Included software in the CD-ROM	XPS driver

Fax Expansion Kit (MX-FXX3)	
Packaged items	External box for Fax functional expansion Modular code Parts for mounting Fax memory (8MB) Installation procedure manual Fax quick guide (abroad only)
Installation caution sheet	6 languages (Japanese/English/German/French/Spanish/ Chinese)
Outer colour	warm white

Internet Fax Expansion Kit (MX-FWX1)	
Packaged items	Product key sheet (Internet Fax) Internet Fax CD-ROM
Included software in the CD-ROM	Internet Fax expansion tool

Sharpdesk License Kit (MX-USX1, USX5, US10, US50, USA0)	
1 license	MX-USX1
5 licenses	MX-USX5
10 licenses	MX-US10
50 licenses	MX-US50
100 licenses	MX-USA0

Application Integration Module (MX-AMX1)	
Packaged items	Instruction manual Product key sheet Sharpdesk CD-ROM Sharpdesk license sheet Sharpdesk serial number (Sharpdesk 1 license, pasted on the product key sheet)
Included software in the CD-ROM	Same as Sharpdesk CD-ROM in the Main Unit

Application Communication Module (MX-AMX2)	
Packaged items	Instruction manual Sharp OSA Utility CD-ROM Application number (pasted on the instruction manual)
Included software in the CD-ROM	Sharp OSA Utility

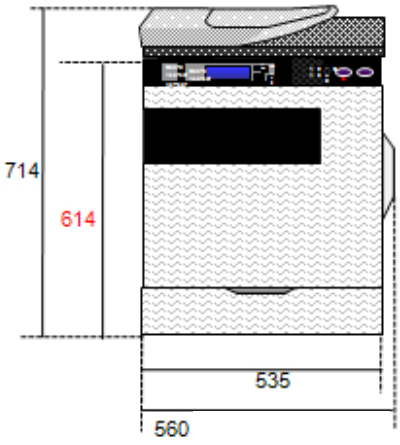
External Account Module (MX-AMX3)	
Packaged items	Instruction manual Sample application CD-ROM Application number (pasted on the instruction manual)
Included software in the CD-ROM	Sharp OSA Utility

Data Security Kit Commercial Version (MX-FR12U for MX-C380/C310) (MX-FR13U for MX-C381/C311)	
Packaged items	Set of security ROMs (Includes USB memory) Installation manual/ Product key sheet Application number (pasted on the product key sheet)
Security Guide (Commercial Version) Product Key sheet	Japanese/ American English/German/ French/ Spanish/ Italian/ Dutch/ Swedish/ Norwegian/ Finnish/ Danish/ Czech/ Polish/ Hungarian/ Greek/ Russian/ Slovak/ Turkish/ Portuguese Romanian (combine with other language)
Installation Procedure Manual	Japanese/ American English/ German/ French/ Spanish

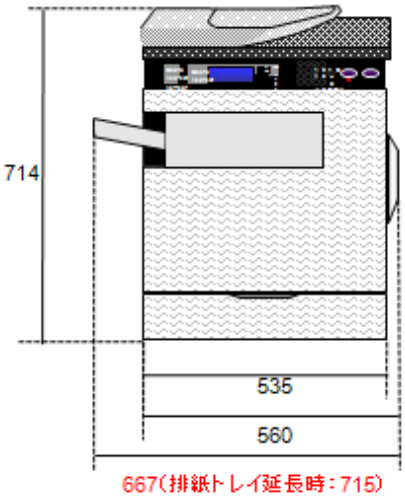
Data Security Kit CC Version (MX-FR12 for MX-C380/C310) (MX-FR13 for MX-C381/C311)	
Packaged items	Set of Security ROMs (Includes USB memory) Installation procedure manual/ Instruction manual/ Additional manual Supplement sheet Validation label (after acquiring the Common Criteria validation) Product key sheet Application number (pasted on the product key sheet)
Security Guide/ Additional Manual	Japanese/ American English *German/ French/ Spanish/ Italian/ Dutch/ Swedish/ Norwegian/ Finnish/ Danish/ Czech/ Polish/ Hungarian/ Greek/ Russian/ Portuguese/ Slovak/ Turkish* *Not bundled with the product because it is not the target of the certification, but it can be provided as data.
Product Key Sheet	Japanese/ American English/ German/ French/ Spanish/ Italian/ Dutch/ Swedish/ Norwegian/ Finnish/ Danish/ Czech/ Polish/ Hungarian/ Greek/ Portuguese/ Russian/ Turkish/ Slovak Romanian (combine with other language)
Supplement sheet	Japanese/ American English
Installation Procedure Manual	Japanese/ American English/ German/ French/ Spanish
Certification label	Certification labels to be attached to the main unit and outer package. * Bundled/ attached after the Common Criteria certification is acquired.

■ Figure of Dimensions

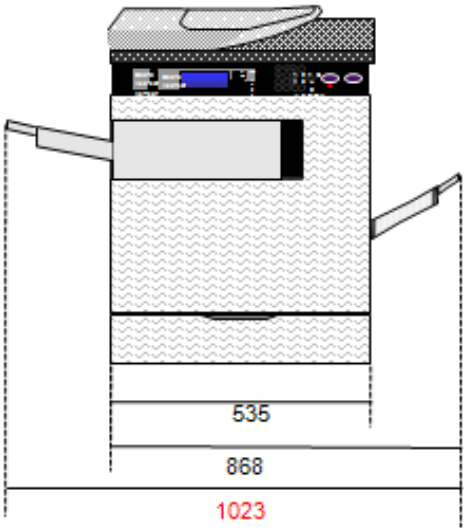
・Front Figure



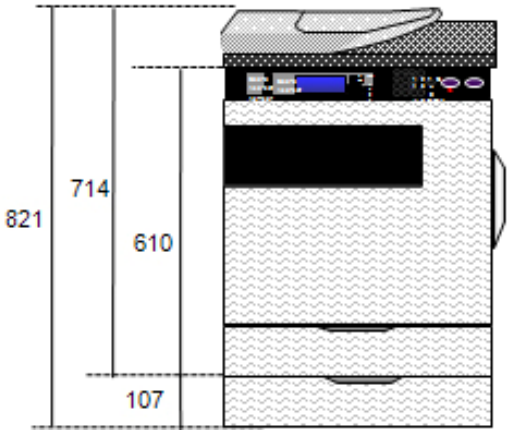
・Main unit + Inner Finisher



・Main unit (with bypass tray extended) +Inner Finisher (with exit tray extended)



・Main unit + Paper feed unit A



・Top view (8.5 inch model)

・Top View (4.3 inch model)

Functions

Copy Function		
	MX-C381/C311	MX-C380/C310
First Copy (Original Cover)	BW: 8.0 seconds, Colour: 8.9 seconds	
First Copy (RSPF)	BW: 9.9 seconds, Colour: 11.5 seconds	
* Portrait feeding of A4 sheets from 1st paper tray, Using the Document glass, Without Auto colour selection and Auto colour, Polygon in rotation.		
Serial Copy	999 pages	
Copy magnification ratios	Same size: 1:1±0.8% AB type: 50%, 70%, 81%, 86%, 100%, 115%, 122%, 141%, 200%	
Zoom	50 – 200% (50 – 200% for RSPF)	
Preset magnification ratio	4	
XY zoom	Yes	
Colour tone Enhancement	Effective for Text, Text/Printed photo, Printed photo, Text/Photo, Photo, Map mode.	
Manual steps	9 steps	
Toner save mode	Monochrome: Yes Colour: Yes Off on Printed photo, Photo, or Light Original	
RGB adjustment	Yes	
Colour balance	Yes	
Saturation adjustment	Yes	
Brightness adjustment	Yes	
Contrast adjustment	No	
Sharpness adjustment	Yes	
Suppress background	Yes	
Auto colour Calibration	Allowed by system settings	
Automatic paper selection	Yes	
Automatic magnification selection	Yes	
Paper type select	Yes Type setting allowed	
Auto tray switching	Yes	
Rotated copy	Yes (When X in 1)	
Electronic sort	Yes	
Rotated sort	No	
Job reservation	Yes	
Tray installation priority	Yes	
Program call / registration	Yes (48) (Program name registration to be examined)	
Document paper size input	Yes	
Indeterminate paper size input	Yes (Indeterminate size can be registered)	
2-sided copy direction switch	Yes	
Preview function	No	
Margin shift	Yes	
Edge/center erase	Yes (edge only)	
Dual page copy	No	
Saddle stitch	Yes (layout only)	
Job build	Yes	
Tandem copy	No	
Cover/insertion	No	
Tab paper insertion	No	

OHP insertion		Yes	
Multi Shot		Yes (Centering available.)	
Book copy		No	
Tab copy		No	
Card shot		Yes	
Stamp	Date print	Yes	
	Text print	Yes	
	Stamp	Yes	
	Page print	Yes	
	User stamp	No	
	Watermark	No	
Image edit	Photo repeat	Yes	
	Multi-page enlargement	No	
	Mirror image	Yes	
	Full image copy (Edge to edge copy)	No	
	Centering	Yes	
	B/W reverse	Yes	
Colour adjustment	RGB adjustment	Yes	
	Sharpness	Yes	
	Suppress background	Yes	
	Colour balance	Yes	
	Brightness	Yes	
	Intensity	Yes	
Quick file		Yes	No
Filing		Yes	Yes (Print data only)
Proof copy		Yes	No
Original count		No	
Mixed original		Yes (“Letter and Legal” size only)	
Slow scan		Yes	
Ignore blank paper		No	
Repeat layout		No	
Chapter inserts		No	
Book division		No	
Move		No	
Shading		No	
Document control		Yes (When the Data Security Kit is installed.)	
Business card mode		Yes (When option installing/ ON/ OFF by the System Settings)	

Printer Functions	
Supported OS	Windows 98*/ Me*/ NT 4.0 SP5 or later*/ 2000/ XP/ XPx64*/ Server 2003/ Server 2003x64*/ Vista/ Vistax64*/ Server 2008/ Server 2008x64* * Drivers(GPD files) are not included in CD-ROM. (WEB only)
	Mac OS 9.0-9.2.2 / Mac OS X 10.2.8 / 10.3.9 / 10.4.11 / 10.5-10.5.4
PDL Emulation	PCL5c compatible, PCL6 compatible, PostScript 3 compatible (381/311 Std, 380/310: Opt), XPS (Opt)

Printer Functions	Content	SPDL2-c PCL6/5c	PS3 (IT model: Std) (Std model: Op)
Multiple Pamphlet	Binds multiple pamphlet outputs into a single booklet.	No	No
Barcode font	JetCAPS BarDIMM emulation	Yes	No
Network tandem print	Two units connected via network can be used simultaneously for a printout.	No	No
Windows Cluster Print	When a Windows server breaks down, a mirror server takes over and executes the suspended print job. There may be colour differences between machine types.	Yes	Yes (Windows Only)
Encryption PDF/ PDF/ TIF / JPEG/ XPS direct print	PDF/ TIFF/ JPEG/ XPS file can be printed without printer driver. (1) Printing of e-mail attachment file (2) Printing from FTP server (3) Printing from setup file on Web page (4) USB memory	Yes (Not for encrypted PDF/PDF)	Yes
E-Mail To Print	Direct printing of an attached file upon receipt of the e-mail. (See (1) above)	Yes	Yes
Pull print from front panel	Browsing of FTP server from front panel and pull-printing of a specified file (direct printing). (See (2) above)	Yes	Yes
USB PULL print	Browsing of print data (including sub-folder) in USB from front panel and pull-printing of a specified file. (See (4) above)	Yes	Yes
SMB PULL print	Browsing of SMB (Network Folder) on the network from front panel and pull-printing of a specified file. (See (2) above)	Yes	Yes
FTP push print	Forwarding the data from a client PC to a MFP server and pull-printing of a specified file (direct printing). (See (2) above)	Yes	Yes
Print by file setup on Web page [Web Submit Print]	Setting and direct printing of a file on network through Web page. (See (3) above)	Yes	Yes
Continuous print function	The function executes multiple print jobs continuously as if they are one single job even if the unit receives an end of job command, in order to support print from the application assuming printout on continuous pages.	Yes	Yes
ROPM	The function enables the printout of a multiple number of copies in one RIP processing.	Yes	Yes
Multi-access	RIP processing must be allowed during printing. Printing must also be allowed during scanning.	Yes	Yes
Paper direction setting for 2-sided printing of letterhead paper and pre-punched paper. (Logo paper print supported (SEEG AOK Corporation)	Pages with front-back attribute such letterhead or punch paper are to be printed correctly in front-back page order for 2-sided printing.	Yes	Yes

Printer Functions	Content	SPDL2-c PCL6/5c	PS3 (IT model: Std) (Std model: Op)
Enable Selected Paper Type/Size in Bypass Tray	For setting of Bypass tray, even if the setup values on the main unit side do not match with those on the driver side, the printing will be executed in the setting of the driver regardless of the setup values on the main unit side.	Yes	Yes
Setting environmental control under terminal server control	Print setting of each client is memorized under meta frame environment (auto print create environment). (Setup for each log-in can be skipped.)	Yes	Yes
Driver delivery function	PAU4.0 allows the administrator to deliver a driver to clients.	Yes	Yes
Form overlay	The function downloads a form to the main unit beforehand, sends the contained data only, and inserts the data into the form in the main unit for printout.	Yes	Yes
Planet Press	Objectif Lune Corporation's Planet Press (Software to execute the mapping of forms (DL beforehand) and variable data in the printer interior)	Yes	Yes
Improve the download method of font/form	Enhance the editing function on the Web page. ・Deletion of each font/form. (Can be performed on the Web page and with PJL command) ・Prevent overwriting of font/form (Can be performed on the Web page and with PJL command) This function is supported in the HDD.	Yes (5c only)	Yes
Expansion font list	In self-print of a font list, ESC command information is needed for BITMAP font. Others can be the same as AR-55/62/70 series.	Yes (5c only)	Yes
Bonjour for Macintosh environment	This technology detects and connects peripheral equipment on the network automatically. The dynamic network connection (computer, peripheral equipment and software) is possible without user setting.	No	Yes
Document control	Print the document with a fixed pattern to avoid illegal copy.	Yes (OPT)	Yes (OPT)
Object judgment (screen change / colour change)	In the printer colour mode output, object of image data (area of photograph / graphic text) is judged. Print screen (resolution) and profile (colour) are changed automatically.	PCL6: Yes PCL5: No	Yes
CMYK Simulation	Choice of CMYK simulation is as follows. 1. Default 2. Japan Colour (Japan) 3. SWOP (North America / General abroad) 4. Euroscale (Europe) 5. Custom The operation when "Default" is selected is the same as in the Pastel. Custom profile can upload by Web setting. Notation of driver is Custom. Example: - Use DIC authorization profile. - Use SWOP profile in Japan.	No	Yes

Printer Functions	Content	SPDL2-c PCL6/5c	PS3 (IT model: Std) (Std model: Op)
ICC Profile	<Source Profile> Choice of source profile is as follows. 1. sRGB 2. AppleRGB 3. Custom Custom profile can upload by Web setting. (The attached ICC profile on devices is available.) <Output Profile> There is no user selection for output profile. Sharp provides Custom profile. Upload of profile supports by service. The tool is set on the Web (service setting). The concrete method of profile making is to be considered separately.	Yes	Yes
Pantone colour	For Pantone colour support, the profile upload can be made by Web setting. The detail of Pantone support is decided by the license agreement with Pantone co.	No	Yes
Layout print	Layout supporting various printing applications.	No	No
Binding with no line	To prevent bound pages from becoming thick, saddle stitch printing is performed for a small number of pages.	No	No
Chapter inserts	Blank pages are inserted automatically to place the first page of each chapter in an odd (or even) page.	Yes	No
Expansion of margin shift	In the current model, the margin shift width setting value can be changed per 10mm. Change from 10mm to 1mm. When Margin Shift is set, it will not be cut off when it is shifted.	Yes	Yes
WSD support		Yes	Yes

Image Send Function			
Mode			
Scanner	Scan to e-mail/ Scan to Desktop (Scan data transmission not dependent on IP addresses under DHCP environment)/ Scan to FTP/ Scan to Network Folder (SMB)/ Scan to USB memory/ Scan to e-mail with Meta/ Scan to Desktop with Meta/ Scan to FTP with Meta/ Scan to Network Folder with Meta Scan to Scan to e-mail/ FTP/ Desktop/ SMB (Document Admin)		
Fax	Fax to Fax (manual) Fax to e-mail / Internet Fax / Fax (relay transfer) Fax to e-mail / FTP/ Desktop/ SMB (Inbound routing) Fax to e-mail / FTP/ Desktop/ SMB (Document Admin)		
Internet Fax (including Direct SMTP sending/ receiving)	Internet Fax to Internet Fax (manual) Internet Fax to e-mail/ FTP/ Desktop/ SMB (Inbound routing) Internet Fax to e-mail/ FTP/ Desktop/ SMB (Document Admin) *Full mode supported (including simple mode)		
Support Image			
Mode	Scanner	Internet Fax Direct SMTP	Fax
File format	Monochrome: TIFF, PDF, Encrypted PDF,XPS Colour: Grayscale, Colour TIFF, JPEG, PDF, Encrypted PDF, XPS	Monochrome: TIFF-FX (TIFF-F / TIFF-S)	---
Image Processing			
Mode	Scanner	Internet Fax Direct SMTP	Fax
Original scanning colour	Full colour, grayscale Black-white	Black-white	
Auto Colour Selection	Yes	---	
Halftone reproduction	Equivalent of 256 steps		
Density adjustment	Auto Manual*+5 steps	Auto + 5 steps	
*Original type (Can be selected when "Manual" is set) - Text / printed photo - Text / Photo – Text - Photo - Printed photo - Map			
Magical scan (Area division+ Suppress Background)	Yes	---	
Selection of image quality	---	Half tone (Black-white only) ON/OFF	
Resolution (depends on file format / transmission method)	100x100dpi	200x100dpi (Half tone not allowed)	Ordinary character (203.2x97.8dpi) (middle tone not allowed)
	200x200dpi	200x200dpi	Fine (203.2x195.6dpi)
	300x300dpi	200x400dpi	Super Fine (203.2x391dpi)
	400x400dpi	400x400dpi	Ultra fine(406.4x391dpi)
	600x600dpi	600x600dpi	---
Specification of Addresses			
Mode	Scanner	Internet Fax Direct SMTP	Fax
Number of Individual address key registration	Total (number of key): maximum: 999		
Number of Group (1 key) address registration	Number of Group (1 key) address registration: maximum 500 Number of Group key registration of direct entry: 5,000 (Total address number included in /999 key)		
Program	48 (Group/Individual)		
Resend	Call up nearest 8 addresses which are specified as a single destination. (Desktop, USB memory, and broadcast are not included)		
CC / BCC sending	Yes	---	

Subject	Selective/direct entry from the list		---
File name	Selective/direct entry from the list		---
Specification of Multiple Addresses			
Mode	Scanner	Internet Fax Direct SMTP	Fax
Broadcast	Yes (500 destinations) (e-mail/ FTP/ Desktop/ SMB allowed)	Yes (500 destinations)	
Transmission Functions			
Mode	Scanner	Internet Fax Direct SMTP	Fax
Memory transmission	94 destinations in all		
On-hook	---		Yes
Quick online transmission	---		Yes
Direct transmission	---		Yes (Switching: between Memory transmission and Direct transmission)
Automatically-reduced transmission	---		Yes
Rotated transmission	---	Yes (B5R to B5, A5R to A5 only)	
Scaled transmission	Yes (Enlargement/ reduction is allowed only from a fixed size to another.)		
Long original transmission	Yes Maximum of 500mm		
Change of the number of pages for each file	Yes	---	
Restriction on transmission size	Yes (Direct SMTP doesn't have limitation)		No
Finish stamp function	No		
Job build mode	Yes		
Slow scan mode	Yes		
Mixed originals feeder	No		
Side erase	Yes		
Original count	Yes		
Reception Function			
Mode	Scanner	Internet Fax Direct SMTP	Fax
Automatic reception	---	Yes	
Manual reception	---	Yes (Direct SMTP: No)	Yes Switching from manual reception to automatic reception. Allowed only for SEF and Japan
Memory reception	---	Yes	
Fixed size reduced reception	---	Yes	
Rotated reception	---	Yes	
Setting of received data print condition	---	---	Yes
2-sided reception	---	Condition setting through the System Setting	
Reception from a specific number not allowed. (To be rejected)	---		Specified numbers only (50 numbers / 20 digits)
Image Check	---	Yes (Users can check received data before printing it)	

Other Functions			
	Scanner	Internet Fax Direct SMTP	Fax
Time specification	Yes		
Polling reception	---		Yes
Date print	---	Yes (Date can be expressed alternatively)	
Page partition transmission	No		
Confidential (receiver unit)	---		Yes(F code method)
Relay broadcast instructions	---		Yes(F code method)
Fax to e-mail/ Internet Fax/ Fax (F code)	---		Yes
Edge erase	Yes		
Center erase	No		
2 in 1	No		
Suppress background	Yes (Only colour and gray scale)	---	
Card shot	Yes (Ratio 63-200%)		
Forwarded data transmission reception (Document Admin)	Yes Forwarded data formats can be selected. (TIFF/ PDF) (Scan to e-mail/ FTP/ SMB/ Desktop/ PC-Internet Fax/ PC-Fax are also supported.)		
Transmission Method			
Mode	Scanner	Internet Fax Direct SMTP	Fax
Transmission time	---		2 seconds level (super G3 / JBIG) 6 seconds level (G3 ECM)
Intercommunication	---		Super G3 / G3
ECM	---		Yes
Record Size			
Mode	Scanner	Internet Fax Direct SMTP	Fax
Maximum record width	---	293mm	
Record size	---	A4R- A5, Letter R – Invoice	
Registration-Related Setting			
Mode	Scanner	Internet Fax Direct SMTP	Fax
Individual/ group	999 destinations		
Program	48		
Number of memory boxes	---		up to 100.
Reply-To registration	1,000 (user registration from Web)*	---	
Quick key (short cut registration)	Yes (001- 999)		
Import/export of address book	Yes (By storage backup)		

*The book for address selection is used when a scan sender is selected.

PC- Fax / PC- I-Fax Functions			
PC-Fax/ PC-I-Fax Operating Environment			
Supported OS	Windows 98 Windows Me Windows NT4.0 Workstation (Service Pack5, IE4.0 or more) Windows 2000 Windows XP Home Edition Windows XP Professional Windows Server 2003 Windows Vista		
PC	IBM PC/AT compatible machine		
CPU	Pentium II 300MHz or more		
Monitor	640x480 Pixels or more of screen resolution 256 or more colours		
Memory	64MB or more		
HDD	Free space of 50MB or more		
Interface	USB 2.0 10/100BASE-TX 1000Base-T		
Communications protocol	LPR/lp Port9100(RAW) IPP USB2.0		
PC-Internet Fax/ PC-Fax Functions			
PC- Fax Send	Yes (with Fax equipped) Maximum of 64 digits for Fax number (including sub-address and passcode)		
PC- Internet Fax Send	Yes (Necessary options: I-Fax expansion kit) Maximum of 64 digits for I-Fax address		
Resolution	200x100 dpi/ 200x200 dpi/ 200x400 dpi/ 400x400 dpi/ 600x600 dpi		
Transmission original sizes	A4/ A5 /B5		
Compression method	MH/ MMR/ JBIG		
Broadcast transmission	Yes (Fax, I-Fax mixture possible. Maximum of 500)		
F code transmission	Yes	Sub-address	Yes. Maximum of 20 digits
		Pass code	Yes. Maximum of 20 digits
Phone book registration / transmission function	Yes		
Use of MFP phone book	No		
Attach cover sheet function	Yes (Not allowed for broadcast transmission)		
Create cover sheets function	Yes		
Own Number Send	Yes (Always printed.)		
Preview function	Yes		
Transmission confirmation (Notice to PC by NJR)	Yes		
Document filing function	Filing	MX-C381/C311: Yes MX-C380/C310: Yes (Print data only)	
	Quick File	MX-C381/C311: Yes MX-C380/C310: No	
PC-Fax Transmission log	Yes (Re-transmission not allowed)		
User authentication	Yes		
Timer	No		
R-KEY (SEEG / SEF only)	Yes		

CONFIGURATIONS

■ Options List

Model Name	Description	C381	C311	C380	C310	Remark
MX-CSX1	1 x 500 sheet Paper Feed Unit A	Opt.				
MX-CSX2	1 x 500 sheet Paper Feed Unit B	Opt.				
MX-DK111	Cabinet for 1 paper drawer	Local				
MX-DK112	Cabinet for 2 paper drawers	Local				
MX-DK113	Cabinet for 3 paper drawers					
MX-DK114	Cabinet for 4 paper drawers					
MX-BTX1	Business Card Feeder	Opt.				
MX-FN12	Inner finisher	Opt.				
MX-PKX5	PS3 Expansion Kit	STD		Opt.		
MX-PUX1	XPS Expansion Kit	Opt.				MX-SMX3 is required
MX-SMX3	Expanded Memory Board (1GB)	Opt.				
MX-FXX3	Facsimile Expansion Kit	Opt.				Includes 8MB flash memory
MX-FWX1	Internet-FAX Expansion Kit	Opt.				
MX-AMX1	Application Integration Module	Opt.				
MX-AMX2	Application Communication Module	Opt.				Can not install with MX-FR12 / MX-FR13.
MX-AMX3	External Account Module	Opt.				
MX-FR12	Data Security Kit	-	-	Opt.	Opt.	Production start date: TBD
MX-FR12U	Data Security Kit Commercial ver	-	.-	Opt.	Opt.	
MX-FR13	Data Security Kit	Opt.	Opt.		-	Production start date: TBD
MX-FR13U	Data Security Kit Commercial ver	Opt.	Opt.		-	
AR-PF1	Barcode Font Kit	Opt.				
MX-USX1/USX5	Sharpdesk ver3.2 1/5-License Kit	Opt.				
MX-US10/US50	Sharpdesk ver3.2 10/50-License Kit	Opt.				
MX-USA0	Sharpdesk ver3.2 100-License Kit	Opt.				

■ Functional Combinations

	Copy	PCL Printing	PS Printing*	XPS Printing	Fax	I-Fax	Scan	Filing	Security	Sharp OSA
MX-C381/C311 MX-C380/C310	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MX-PKX5			✓							
MX-PUX1				✓						
MX-SMX3				✓						
MX-FXX3					✓					
MX-FWX1						✓				
MX-FRX12/U or MX-FRX13/U									✓	
MX-AMX2/3										✓

✓ required

* In the case of MX-C381/C311, PS printing is standard.

Installation Reference Guide

Options	Installation/Soft Keys
MX-PKX5 PS3 Expansion Kit	Soft key has to be input for activation.
MX-PUX1 XPS Expansion Kit	Soft key has to be input for activation.
MX-FXX3 Fax Expansion Kit	Install External box by using parts for mounting.
MX-FRX12U/ MX-FRX13U Data Security Kit (Commercial Version)	Replace flash ROM physically and install the Document control board. (Download from USB memory.) Then soft key has to be input for activation.
MX-FRX12/ MX-FRX13 Data Security Kit	Replace flash ROM physically and install the Document control board. (Download from USB memory.) Then soft key has to be input for activation.
MX-FWX1 Internet Fax Expansion Kit	Soft key has to be input for activation.

Consumables List

Model name	Contents	Qty	Life	Min. Order Qty	Remark
MX-C38GTB	Black Toner Cartridge	X1	10k	10	A4 5% coverage
MX-C38GTC	Cyan Toner Cartridge	X1	10k	10	A4 5% coverage
MX-C38GTM	Magenta Toner Cartridge	X1	10k	10	A4 5% coverage
MX-C38GTY	Yellow Toner Cartridge	X1	10k	10	A4 5% coverage
MX-C38GRB	Drum Cartridge (For Black only)	X1	60k	10	For black only
MX-C38GRS	Drum Cartridge (For Y/M/C)	X1	30K	10	For Y/M/C
MX-C38GVB	Black Developer Cartridge	X1	60k	10	
MX-C38GVC	Cyan Developer Cartridge	X1	30K	10	
MX-C38GVM	Magenta Developer Cartridge	X1	30K	10	
MX-C38GVY	Yellow Developer Cartridge	X1	30K	10	
MX-C31HK	Heat Roller Kit	X1	120K	5	
MX-C31Y1	Primary Transfer Kit	X1	120K	5	
MX-C31U1	Primary Transfer Belt unit	X1	120K	1	
MX-C31U2	Secondary Transfer Roller Unit	X1	60K	1	
MX-C31FU	Fusing Unit	X1	120K	1	
MX-C31FL	Filter Kit	X1	120K	10	
MX-C31HB	Toner Collection Container	X2	15K	5	
MX-C31RT	Feeding Roller Kit	X1	-	10	
MX-C31MR	MF Feeding Roller Kit	X1	-	10	
MX-C31DF	DF Roller Kit	X1	-	10	
MX-SCX1	Staple Cartridge	X3	5,000times	20	

The life may vary depending on the document and the environmental factors.